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ABSTRACT

To help minority group Americans become integrated into our industrial system, organizations need information on differences in job attitudes of white and black male employees, particularly how they perceive and react to supervisors. A pilot study demonstrated the feasibility of the questionnaire method for the target sample and illuminated the scope of topics to be included. A survey of nearly 500 white and 200 black workers in eight cooperating companies in the northeastern United States yielded the following results: (1) slightly positive job attitudes, (2) somewhat greater satisfaction among black workers on the average, but not for each individual company, (3) higher performance ratings among satisfied employees, (4) greater concern with promotions and the future in general among blacks, and (5) moderate satisfaction with supervision among both blacks and whites. (BH)

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THE JOB ATTITUDES OF WORKERS FROM DIFFERENT ETHNIC BACKGROUNDS

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I. INTRODUCTION

As black and other minority group Americans become integrated into our industrial system in a manner and at a level never heretofore achieved, the problems that have been stimulated by such change have become apparent to all concerned. Basically, such problems fall into two major areas. One of these is the question of how and on what basis minority group members will be brought into an organization. Thus, there is evidence to indicate that black Americans do not on the average score as high on traditional tools of selection (such as tests) as white Americans, with such tests reflecting the differential socio-economic backgrounds of the two groups (Tyler, 1965); also, there is evidence that equivalent scores on typical selection tests may differ in psychological meaning for the different groups, with these differences being reflected in the relative usefulness of the tests for selection purposes (Kirkpatrick et al., 1968).

Important as these questions are, however, they are not the ones that stimulated the research reported here. Instead, our concern is with a second major problem: Developing knowledge and information concerning possible differences in job attitudes between white and black employees which would be of use to the leadership of an organization, with particular focus on possible differences between the two groups in how they perceive and react to their supervisors.

The major source of concern with this type of question is a practical one from the standpoints of the individual employee, the employing organization, and society. For one thing, there is evidence that job attitudes are related to the mental health of employees (Kornhauser, 1964; Greenhaus, 1970). Job attitudes also may significantly be associated with such key aspects of job performance as absenteeism, turnover, and even productivity (Katzell et al., 1961; Katzell, 1964; Vroom, 1964; Hulin, 1968).

The hypothesis that white and black employees may, on the average, differ in their job attitudes stems from two sets of considerations. Since job satisfaction and job perceptions depend in part on the employee's view of the work situation and its rewards in light of his own motivational structure, there is considerable evidence to suggest important motivational differences between the two groups. For example, it has been found that blacks generally score lower than whites on (a) need-achievement (Minigioni,1965); (b) belief in being able to control one's fate (Lefcourt & Ladwig, 1965b); (c) need for dominance and autonomy (Brazzel, 1964); (d) self-esteem and self-liking (Clark, 1968) and, in addition, have a higher degree of self-doubt (Deutsch, 1960). Considering these findings as a whole and in light of Korman's (1966) finding that low self-esteem leads to lack of self-enhancing behavior, there seems to be good reason to believe that significant differences in job attitudes and perceptions may exist between blacks and whites in similar job situations.

The second reason for believing that there may be significant differences in job attitudes between the two races stems from the possibility that they are exposed to different conditions and treatment on the job. Since the vast majority of industrial supervisors are white, their possible unfamiliarity with or prejudice toward black workers may lead to differential treatment; blacks, too, may relate to white superiors differently than do whites. Thus, there is considerable data indicating that black performance suffers under white leadership or when comparisons with whites are being made (Katz, 1967; Katz & Greenbaum, 1963; Katz, Roberts, & Robinson, 1965; Katz & Benjamin, 1960; Katz & Cohen, 1962; Lefcourt & Ladwig, 1965a). Other differences in job conditions may also differentially affect whites and blacks, such as promotion opportunities, training, and so forth.

Given these reasons for believing that white and black employees may have different average job attitudes, the paucity of systematic information on this subject made an investigation of it most timely.

These considerations, then, constituted the background for our project and served as the basis upon which we formulated our two major objectives. The first of these objectives was the general one of determining in a descriptive sense how black and white employees differ in their job perceptions and attitudes, and the implications of such differences for job performance. The second objective was the more specific one of using the findings of our research as a base to develop specific suggestions and recommendations concerning methods of management and supervision that are more likely to lead to improved job performance and job satisfaction of minority group employees. It is our findings concerning these two objectives that we will report here.

To accomplish these objectives, it was decided to survey the job attitudes and perceptions of comparable samples of black and white employees. A survey which would produce results representative of all black and white workers in the country would require systematic sampling in terms not only of ethnic parameters, but also at least by type of industry, type of job within industries, sex and geography. Desirable as such a national survey might be, it was an undertaking which would take much more time, money and other resources than available. Accordingly, a more modest exploratory study was undertaken, in order to reveal to what extent significant differences in job attitudes exist between black and white workers in a small sample of companies and jobs. The study was designed to be limited to companies in the northeastern region of the United States, to entry-level jobs, and to males only. Although it was originally intended to sample both "blue-collar" and "white-collar" occupations, we were able to find appreciable numbers of black employees only in "blue-collar" jobs among the many companies contacted and who were in a position to cooperate in the survey. Also, numerous difficulties prevented attaining a sample of the size and extent originally planned, as noted in the next section.

The study was conducted in two phases. An initial pilot study focussed on methods of data collection, using both interview and printed questionnaire. This study indicated the feasibility of the questionnaire method for the target sample, as well as illuminating the scope of topics to be included. The second, main study, entailed a survey of a larger number of workers, both white and black, in a second set of cooperating companies.

The remainder of this report will be devoted to a description of these studies and their results. The immediately following section (II) describes the pilot study. Following this, section III deals with the main study. The final section takes up the conclusions and implications of the study.

II. THE PILOT STUDY

Two methodological questions had to be answered before a large-scale investigation was undertaken: (a) does the conventional paper-and-pencil attitude questionnaire work equally well in both ethnic groups of employees; and (b) are both ethnic groups concerned with the same set of issues when expressing their attitudes toward the job. The basic reasons for believing that similarity in these respects between whites and blacks could not be taken for granted were the possibility that more of the latter might be unfamiliar with questionnaire surveys as well as having lower reading skills, and also be less completely acculturated to standard conditions of industrial employment.

A pilot study was therefore undertaken in which members of both ethnic groups would not only be requested to complete a paper-and-pencil job attitude questionnaire, but would also be interviewed about their jobs by experienced interviewers. The topics discussed in the relatively unstructured interviews would provide guidance on the question of similarity of concerns pertaining to the job. The degree of correspondence between the questionnaire and interview results would help clarify the issue of whether the former method would be equally valid in the two ethnic samples.

To obtain enough subjects for this pilot study, we found it necessary to contact a total of 48 employing organizations. It may be noted at this point that the research project throughout its entire course was severely hindered by the inability or unwillingness to cooperate on the part of industry. No company agreeing to participate had even a minimal number of white-collar blacks. Most companies which were contacted declined to participate for reasons such as: no interest in scientific research; research in the area of minority groups too sensitive and might provoke labor unrest;* unwillingness to expose company problems to outside researchers; few male black employees; unwillingness to invest the time and effort needed to obtain useful results.

Even when assurances of cooperation were obtained, the outcome was often short of what was desired. In the main study, one company official lost the first shipment of 100 questionnaires; when replacements were provided, the official administered then to a sample that was both too small and included females, despite explicit instructions to the contrary. Another company returned only 5 of 100 questionnaires; a third returned only 12 of 250 questionnaires--rates of return so low as to be virtually useless. Other circumstances outside anyone's control also hampered the ability of companies to cooperate even after they had agreed to. For example, two companies experienced prolonged strikes, two found it necessary to lay off large numbers of workers in the categories to be studied, and another cancelled the scheduled survey because a union felt that it might affect an upcoming election of union officers. Eventually substantial data were obtained from only five companies.

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*The sponsorship of the study by the Labor Department may have acted as a hindrance rather than a help for this reason. Some companies seemed to be sensitive about research on this topic that was conducted under government auspices.

Subjects

The following subjects, all males, were eventually obtained for the pilot study:

	Blue-Collar	White-Collar
White	Company I: 6 Company A: 10 Company K: 4	Company J: 8 Company L: 1
Black	Company I: 6 Company A: 7	Company J: 8 Company L: 10

Subjects were nominated by company officials, with every attempt being made to obtain blacks and whites performing comparable kinds of work. However, the nominees were not required to participate if they so chose, but virtually all agreed to participate.

The following biographical data were obtained from the pilot subjects:

Variable	Company J		Company K	Company L	Company I		Company A	
	Black	White	White	Black	Black	White	Black	White
Mean Age (years)	24.3	20.8	23.5	28.1	30.7	25.0	36.0	36.0
Mean Tenure (months)	21.0	22.5	46.5	16.7	13.3	42.2	--	--
Education (Frequency)								
No High School	1	0	0	2	1	1	0	0
High School	5	4	4	2	2	2	7	10
College	1	2	0	6	0	0	0	0
Not reported	1	2	0	0	3	3	0	0

Nature of Companies and Jobs:

Company J:	An insurance company. Processing IBM cards; underwriting insurance policies; settlement analysis; determination of annuities; policy claims; operating copy machine.
Company K:	Gardening. Security; care of greenhouse and plants.
Company L:	Civil Service. Aides to case workers--field work, paper work.
Company I:	Trucking. Clerk; sheet worker; loading and unloading trucks; mark destinations on packages.
Company A:	An airline. Fleet service--cleaning out cabins; loading baggage; work in warehouse.

In addition to a racial comparison, thought was given to dividing employees into categories of "hard-core" and "regular" on the basis of formal definitions involving employment, educational, and/or ethnic backgrounds. It soon became evident from the biographical data, however, that the "hard-core" and regular groups were very similar in most of these respects, and that the only major difference was racial. As a result, the data were analyzed in terms of ethnic differences and the "hard-core" nomenclature was abandoned.

Research Instruments

The areas of job satisfaction to be covered by the pilot interview were determined by conducting an extensive review of job satisfaction research and selecting those areas that were most prominent. The areas thus arrived at included supervision, pay, the work itself, co-workers, promotions, and working conditions. In addition, open-ended questions were included to enable the detection of additional areas of job satisfaction and dissatisfaction that might emerge as important. (The interview schedule is shown in Appendix A.) Two interviewers, one white and one black, were trained in the interview procedure. Then, one-hour interviews from each of the 60 pilot subjects were recorded on tape, and subsequently content-analyzed by a rater who scored the employee's satisfaction with each job area on a five-point scale. It was determined at this point that the race of the interviewer did not appear to have any noticeable effect on the results, and a comparison of the five-point scales obtained from several cases coded by two raters indicated that the raters agreed reasonably well with regard to the content analysis.

In addition, a printed questionnaire dealing with the same areas of job satisfaction was administered at the time of the interview to determine whether or not paper-and-pencil instruments could be appropriately used with employees of this type. Items were constructed by the researchers, based in large part on the Minnesota Triple Audit Questionnaire (Fox et al., 1954) and Korman's (1962) cluster analysis of this questionnaire. A particular concern, which precluded the use of most currently available instruments, was to use simple language that would be readily understood by employees of modest educational attainment. (The experimental questionnaire is shown in Appendix B.) The sequence of administration of the questionnaire and interview was randomized both with regard to interviewees and interviewers; no systematic order effects were observed upon the results of either the interview or the questionnaire.

Results

The questionnaire data obtained from the pilot subjects were then analyzed to determine the feasibility of using only the written questionnaire in the main study; these results are shown in Tables 1, 2, and 3. An analysis of means of individual items, as well as category scores consisting of means of items pertaining to each dimension, indicated

Table 1

Results of Pilot Study: Means of Questionnaire Items

Item (5=satisfied, 1=dissatisfied)	White Blue-Collar (N=20)	White White-Collar (N=6)	Black Blue-Collar (N=13)	Black White-Collar (N=12)	Total White (N=26)	Total Black (N=25)	Total Blue-Collar (N=33)	Total White-Collar (N=18)
1. Supervisor is nice guy	3.15	4.33	3.85	4.33	3.42	4.08	3.42	4.33
2. Not paid enough compared to others in company	3.00	2.50	3.08	1.83	2.89	2.48	3.03	2.01
3. Supervisor carries weight	3.35	4.17	4.00	3.50	3.54	3.76	3.61	3.72
4. Supervisor is too easy going	3.85	3.33	4.08	3.67	3.73	3.88	3.94	3.56
5. Job suits better than any other	2.35	2.50	1.85	2.50	2.38	2.16	2.15	2.50
6. Co-worker cooperation	3.10	4.17	3.69	3.25	3.35	3.48	3.33	3.56
7. Supervisor is good	3.40	4.33	3.62	4.08	3.62	3.84	3.49	4.17
8. Chance of getting ahead	3.10	3.83	2.92	3.50	3.27	3.15	3.03	3.61
9. General working conditions	2.15	3.67	2.38	3.67	2.50	3.00	2.24	3.67
10. Getting a valuable experience	2.70	3.67	3.00	4.00	2.92	3.48	2.82	3.89
11. Supervisor handles complaints	3.30	3.50	3.15	4.00	3.35	3.56	3.24	3.83
12. Company promotions are fair	2.85	3.00	2.77	2.83	2.88	2.80	2.82	2.89

(Continued)

Table 1 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	White Blue-Collar (N=20)	White White-Collar (N=6)	Black Blue-Collar (N=13)	Black White Collar (N=12)	Total White (N=26)	Total Black (N=25)	Total Blue-Collar (N=33)	Total White-Collar (N=18)
13. Pay is OK	3.70	2.00	3.00	1.67	3.31	2.36	3.42	1.78
14. Supervisor knows his stuff	3.30	4.33	3.38	3.83	3.54	3.60	3.33	4.00
15. Supervisor explains new work	3.10	4.17	3.77	3.92	3.35	3.84	3.36	4.00
16. Would get more pay elsewhere	3.00	2.00	3.31	2.75	2.77	3.04	3.12	2.50
17. Some employees don't do fair share of the work	1.90	1.67	2.54	2.33	1.85	2.44	2.15	2.11
18. Supervisor provides training	3.00	4.33	3.62	3.83	3.27	3.72	3.24	3.94
19. Job too dull and boring	2.95	2.50	3.77	3.58	2.85	3.68	3.68	3.22
20. Supervisor on my back	3.70	4.33	3.77	3.92	3.81	3.84	3.73	4.00
21. Co-workers get along well	3.90	4.33	3.77	3.75	3.96	3.76	3.85	3.89
22. Supervisor listens to employees	3.35	3.67	3.62	3.75	3.42	3.68	3.45	3.72
23. Supervisor throws his weight around	3.10	4.33	3.62	4.08	3.35	3.84	3.30	4.11
24. Expect better job in this company	2.95	3.83	3.46	4.08	3.15	3.76	3.15	4.00
25. Supervisor puts on too much pressure	3.35	4.33	3.54	4.00	3.58	3.76	3.42	4.11

(Continued)

Table 1 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	White Blue-Collar (N=20)	White White-Collar (N=6)	Black Blue-Collar (N=13)	Black White-Collar (N=12)	Total White (N=26)	Total Black (N=25)	Total Blue-Collar (N=33)	Total White-Collar (N=18)
DIMENSIONS: SUPERVISION	3.33	4.02	3.67	3.85	3.49	3.75	3.47	3.91
PAY	3.23	2.17	3.13	2.08	2.99	2.63	3.19	2.11
JOB	2.65	2.89	2.92	3.36	2.71	3.13	2.76	3.20
CO-WORKERS	2.97	3.33	3.33	3.11	3.05	3.23	3.11	3.19
ADVANCEMENT	2.97	3.56	3.05	3.47	3.10	3.25	3.00	3.50

Table 2

Results of Pilot Study: Interview-Questionnaire Correlations

	Supervision	Pay	Job	Co-workers	Advancement	Working Conditions
White	.53** (N=26)	.60** (N=26)	.48* (N=26)	.02 (N=12)	.66** (N=23)	-.42 (N=18)
Black	.61** (N=22)	.81** (N=23)	.43* (N=22)	.32 (N=11)	.54* (N=22)	.65* (N=10)

Note.-The total number of respondents involved in this comparison was 55; N's vary for different attitude dimensions depending on the number of Ss expressing attitudes on each topic during their interviews.

*p < .05.

**p < .01.

Table 3

Results of Pilot Study: Summary of Item Analysis of Questionnaire

Item	Item-Dimension Correlation			Highest Correlation with Another Dimension			Decision about Item
	Total	White	Black	Total	White	Black	
			Supervision Items				
1	.83	.80	.87	.51	.48	.56	Retain
3	.35	.63	-.08	nil*	.40	nil	Discard
4	-.06	.04	-.24	nil	nil	nil	Discard
7	.81	.76	.88	.54	.58	.48	Retain
11	.48	.28	.74	.41	nil	.56	Retain
14	.64	.60	.71	.34	.46	nil	Retain
15	.85	.84	.85	.45	.58	.41	Retain
18	.63	.51	.76	.37	.40	.36	Retain
20	.70	.70	.72	.31	.40	.49	Retain
22	.74	.67	.81	.50	.55	.51	Retain
23	.78	.78	.77	.56	.58	.61	Retain
25	.73	.73	.73	.40	.49	.41	Retain
			Pay Items				
2	.83	.74	.90	nil	nil	nil	Retain
13	.85	.85	.87	nil	nil	nil	Retain
16	.75	.79	.81	nil	nil	nil	Retain

(Continued)

Table 3 (Cont'd)

Item	Item-Dimension Correlation			Highest Correlation with Another Dimension			Decision about Item
	Total	White	Black	Total	White	Black	
				Job Items			
5	.62	.63	.72	.36	nil	.42	Retain
10	.76	.77	.71	.61	.54	.70	Retain
19	.73	.71	.73	.31	.39	nil	Retain
				Co-workers Items			
6	.81	.84	.86	.49	.58	.53	Retain
17	.57	.17	.80	nil	nil	.57	Retain
21	.69	.68	.74	.39	.42	.63	Retain
				Advancement Items			
8	.82	.88	.78	.41	.46	.40	Retain
12	.72	.75	.71	.32	nil	.51	Retain
24	.83	.85	.82	.53	.50	.51	Retain

[*] nil = approximately zero.

that the questionnaire appeared to be accurately reflecting existing job conditions. For example, Company L employees received low pay, and the white-collar groups to which these employees belonged expressed dissatisfaction with their pay; working conditions were seen as better by the white-collar group, which was also in line with the realities of the situation (see Table 1). In addition, the results of the questionnaire demonstrated high Pearson product-moment correlations with the interview results for all dimensions of job satisfaction, except those concerning co-workers (both ethnic groups) and concerning working conditions (whites), as shown in Table 2. In both these exceptional instances, the number of questionnaire items and/or the number of interview respondents discussing such issues were small, so that the result was considered not contra-indicative of the utility of questionnaires.

It was therefore concluded that it would in fact be feasible to use the printed questionnaire in the main study. Consequently, the questionnaire was item-analyzed by correlating item responses with category scores; items which did not appear to measure the dimension to which they had been assigned were dropped, and new items were added which were judged to be more appropriate. The results of this correlational analysis are reported in Table 3.

III. THE MAIN STUDY

The revised questionnaire was the instrument used to survey job attitudes of a larger sample of workers in seven companies. The details of this study constitute the present chapter.

Subjects

The following subjects, all males, were obtained in the main study:

	Blue-Collar	White-Collar
White	Company A: 390 Company B: 25 Company C: 11 Company D: 17 Company E: 26 Company F: 3 Company G: 5	Company H: 5
Black	Company A: 81 Company B: 21 Company C: 34 Company D: 18 Company E: 19 Company F: 9	Company H: 20

Total: **whites, 482; blacks, 202. The white-collar sample, however, was too small for statistical analysis and was excluded from the study, making the actual total 477 whites and 182 blacks.**

The employees were selected by company officials with the goal of obtaining samples of black and white employees performing comparable kinds of jobs. Employees were invited to participate with the explanation that the survey was being done by New York University in an effort to understand better how people in entry jobs feel about their work. Confidentiality was assured. Participation was encouraged, but not required. A negligible number of those selected declined to participate.

The biographical data summarized in Table 4 were obtained from the participants; the descriptions of jobs in companies were provided by management. The black and white groups were similar on the biographical data; the only significant differences were that the white workers at Companies A, D, and E had longer tenure than the black workers, while the white workers at Company B reported higher father's income as they were growing up than did black workers. In accordance with modern statistical thinking (see Cohen, 1965; Welkowitz, Ewen, & Cohen, in press), it is useful to test the statistical significance of differences between means by computing point-biserial correlation coefficients in order to provide an index of the strength of the relationship between the variables as well as the level of significance. For example, the r_{pb} of .10 between ethnic group and tenure in the case of Company A indicates that the relationship in this sample is very weak, while the r_{pb} of .49 in the case of Company D shows that the relationship between the ethnic group and tenure in this sample is fairly strong. This provides important additional information to that given by the t test of significance, which indicates only that the mean tenure is unlikely to be exactly the same for the black and white populations from which the samples were drawn (that is, the value of r_{pb} in

Table 4

Characteristics of Sample in Main Study

Variable	Company A				Company B				Company C			
	Black (N=81)		White (N=390)		Black (N=21)		White (N=25)		Black (N=34)		White (N=11)	
	$\overline{X}$	s	$\overline{X}$	s	$\overline{X}$	s	$\overline{X}$	s	$\overline{X}$	s	$\overline{X}$	s
Mean Age (years)	30.9	8.2	31.0	8.8	30.1	7.8	28.1	7.7	31.3	9.3	29.4	8.7
Mean Tenure (months)	42.8	57.4	59.0[a]	61.0	13.4	5.2	17.2	11.1	16.2	14.5	19.8	15.4
Education (years)	All H.S. Graduates				11.4	2.5	11.8	1.2	10.3	1.8	9.4	2.1
Father's Education (years)	Not Available				9.5	4.2	9.5	2.8	9.2	2.9	10.3	3.2
Mother's Education (years)	Not Available				9.6	2.3	10.1	2.6	9.4	2.2	8.8	2.4
Father's Income (scale: 3=more than \$100 per week; 2=\$50-\$100 per week; 1=less than \$50 per week)	Not Available				1.8	0.7	2.3[b]	0.6	2.1	0.9	2.0	0.8

[a] Significant difference between means of blacks and whites, $p < .05$, $r_{pb} = .10$.

[b] Significant difference between means of blacks and whites, $p < .05$, $r_{pb} = .37$.

Nature of Companies and Jobs:

Company A: An airline. Fleet service clerks--cleaning out cabins; loading baggage; freight handling in warehouse.
Locations: Boston (N=30), Washington (N=22), Cleveland (N=29), Syracuse (N=26), Cincinnati (N=20), Nashville (N=23), Dallas (N=63), Phoenix (N=16), New York (N=109), Chicago (N=93), Los Angeles (N=43), Detroit (N=35), San Francisco (N=28).

Company B: A public utility. Mechanic's helpers; lineman's helpers; Street Department laborers.

Company C: An airline. Aircraft cleaners; hitchen helpers.

(Continued)

Table 4 (Cont'd)

Variable	Company D				Company E			
	Black (N=18)		White (N=17)		Black (N=19)		White (N=26)	
	$\overline{X}$	s	$\overline{X}$	s	$\overline{X}$	s	$\overline{X}$	s
Mean Age (years)	34.7	10.3	37.7	12.7	24.6	5.5	25.0	6.1
Mean Tenure (months)	32.2	21.3	64.4[c]	41.9	11.9	9.1	18.5[d]	12.1
Education (years)	11.0	1.3	10.4	2.6	11.9	0.9	12.0	0.7
Father's Education (years)	8.9	3.8	10.2	4.7	9.3	2.9	10.6	3.1
Mother's Education (years)	9.9	3.3	9.8	3.6	11.1	2.4	10.8	2.2
Father's Income (scale: 3=more than $100 per week; 2=$50-$100 per week; 1=less than $50 per week)	2.0	0.7	1.7	0.8	1.8	1.1	1.2	0.7

[c] Significant difference between means of blacks and whites, $p < .05$, $r_{pb} = .49$

[d] Significant difference between means of blacks and whites, $p < .05$, $r_{pb} = .31$.

Nature of Companies and Jobs:

Company D: Manufacturing. Entry-level jobs.

Company E: Manufacturing. Material handling; machine cleaning.

the population is unlikely to be exactly .00) and does not provide a measure of strength of relationship.

Since there were relatively few and minor differences between the ethnic groups on the socio-economic and background variables, it is possible from the survey data to make a direct determinatior of the relationship between ethnic group and job attitudes and performance, without being concerned about possible confounding of the comparisons by extraneous background variables. On the other hand, the fact that the black employees in this sample were socio-economically similar to the whites, both groups being generally lower-middle-class, indicates that our findings will not necessarily be applicable to other socio-economic strata. More particularly, our findings will not necessarily be applicable to the "hard-core unemployed," a population which is the target of much attention in the battle with the race-poverty complex of problems.

Since the companies in the study were all officially engaged in anti-poverty programs, inquiry was made of management by the investigators concerning why the samples, particularly of blacks, did not represent lower educational and economic backgrounds. Although hard data could not be furnished, all the management officials who were queried indicated that relatively few of the "hard-core" personnel who could be recruited met the requirement for participation in the study of having been on the job at least three months after the initial period of training. This was because "hard-core" employees were mostly either (a) still in training, or (b) unlikely to remain employed for as long as three months after training.

Research Instruments

The questionnaire developed in the pilot study was expanded to include, in addition to job satisfaction, the following topics: self-rated criteria with regard to such aspects of job performance as quantity of work, quality of work, punctuality, and absences; the importance of the job to the employee; the importance of the various features of the job to the employee; the employee's expectancy that doing a good job would be rewarded; satisfaction with non-job areas such as family life, friends, and spare time; and certain biographical data. All of the satisfaction categories developed in the pilot study were included in the final version. However, since few satisfaction items concerning working conditions were included in the final form of the questionnaire, they were not combined into a dimension score in the subsequent analysis.

The questionnaire used in the main study for all companies except Company A is shown in Appendix C. The questionnaire was distributed to employees by company officials, in accordance with the instructions shown in Appendix D, and mailed anonymously directly to the researchers by the employee. It was expected that the anonymous mailing would reassure the employees as to the confidentiality of their responses and minimize any feelings of threat that might be caused by company administration of the questionnaires. The Company A questionnaire is shown in Appendix E; it was somewhat altered in order to make it more relevant to the specific job conditions that existed at that company. The Company A questionnaire took into consideration such factors as working for an airline; working under several supervisors rather than just one; training given by the company; and job details such as working outdoors. This modification did not, however, completely preclude comparison of Company A results with those obtained from other companies, as will be seen in subsequent sections. The questionnaire was administered similarly in this company except that the employees identified themselves; names were of course kept confidential by the researchers. Identification was necessary here in order to compare questionnaire responses with job performance ratings compiled for employees in this company.

In the tabular presentations below of responses to specific items, the items will be stated in abbreviated form to conserve space; however, each item will be identified by number so that its actual content can be determined from the appended questionnaires.

External criterion data concerning employee job performance were available in the Company A study. Supervisors' ratings were obtained on the company's standard form, which consists of nine-point scales covering the following areas: quality of work, quantity of work, attendance, cooperation with co-workers, willingness to work, attitude toward the company, punctuality, overall job performance, common sense, and ability to follow instructions. The rating form is shown in Appendix F. In other companies, the only criterion data obtainable were self-ratings by the subjects.

Results

1. The Company A Study

The data from Company A were for the most part analyzed separately from the other data in this project for two reasons. First, as discussed above, the questionnaire used at this company was modified to make it more pertinent to the specific job conditions at that company and it therefore differed somewhat from the questionnaire used at the other companies. Second, external criterion data were available in this company, but not in the others.

The satisfaction data (items 1-53, Appendix E) from Company A employees were first factor analyzed by the principal axis method with Varimax rotation. Six orthogonal attitudinal factors were obtained: opportunities for advancement and training at the company; attitudes toward employee's job and the company; supervision; cooperation among co-workers and supervisors; pay and working conditions; and an unclear sixth factor (see Table 5).

The five interpretable factors correspond essentially to the five dimensions which were built into the questionnaire. This result is not unexpected, since the dimensions were selected partly on the basis of previous factorial analyses. However, this finding does support both the salience of the dimensions and our success in preparing items which measure them. It also renders defensible the comparison of the factor scores of Company A employees with the dimension scores of employees from other companies, in spite of minor differences in content of some of the items.

Table 5

Company A: Factor Analysis

Factor and Items	Loadings on Primary Factor	Loadings on Other Factors Factor	Loading
I. Advancement and Training			
"Markers"			
19. Company is fair in promoting	.72		
8. Have chance to be promoted	.70		
14. Fairly considered for openings	.68		
49. No favoritism played	.58		
47. Company keeps me informed of openings	.58		
48. Opportunity for more training	.55		
Additional Items			
33. It's who you know that counts	.68	3	-.32
42. Top management cares about me	.54	5	-.38
31. Expect to get better job here	.50	6	.49
II. Job and Company			
"Markers"			
12. Look forward to coming to work	.61		
26. Job not dull and boring	.61		
45. Job is important to company	.53		
44. Friends outside company think job is good	.53		

(Continued)

Table 5 (Cont'd)

Factor and Items	Loadings Primary Factor	Loadings on Other Factors Factor	 Loading
II. Job and Company (cont'd)			
Additional Items			
10. Feelings about company make me want to do a better job	.55	3	-.33
17. Getting valuable experience	.52	1	.42
33. Company is good to work for	.51	3	-.30
41. Chance to use my special abilities	.50	6	-.37
37. Rather not do same job for other company	.49		
15. Something new and different happens every day	.49		
52. Like working for airline	.46		
III. Supervision			
"Markers"			
30. Supervisors don't throw weight around	.69		
32. Supervisors don't put on pressure	.68		
16. Supervisors treat you like adult	.66		
7. Supervisors are good	.64		
27. Supervisors not on my back	.61		
1. Most supervisors are nice guys	.59		

(Continued)

Table 5 (Cont'd)

Factor and Items	Loadings on Primary Factor	Loadings on Other Factors Factor	 Loading
III. Supervision (cont'd)			
Additional Items			
39. Supervisors treat me with respect	.60	2	-.32
29. Supervisors listen to employees	.57	5	.34
18. Supervisors take care of complaints	.51	1	-.31
11. Not too much pressure	.48		
21. Supervisors really know job	.48	1	-.30
13. Not worried about losing job	.39		
22. Supervisors explain new work	.38		
IV. Cooperation Among Employees and Supervisors			
"Markers"			
6. Cooperation among employees	.69		
3. Employees do what supervisor wants	.63		
28. Employees get along well with each other	.62		
Additional Items			
4. Supervisors are not too easy going	.50	3	.31
24. Employees do fair share of work	.38		

(Continued)

Table 5 (Cont'd)

Factor and Items	Loadings on Primary Factor	Loadings on Other Factors Factor	Loadings on Other Factors Loadings
V. Pay and Working Conditions			
"Markers"			
23. Can make more in other companies	.58		
20. Pay is OK	.55		
Additional Items			
46. Company provides good equipment	.50	3	.36
2. Friends outside company don't earn more	.47		
9. General working conditions are OK	.46	3	.30
43. When hired, was told what job would be like	.33		

In analyzing the data, each employee's satisfaction score on each factor was determined by scoring only those items with a high loading on the factor. A total satisfaction score was also computed, being the average score on all satisfaction items. Next, mean differences between the two ethnic groups were analyzed both on the above scores as well as on individual items; the results are shown in Table 6.

The results show that, on the whole, the employees expressed themselves as being moderately satisfied with their jobs, with the black employees somewhat more satisfied than whites. However, the size of the correlations between the various job areas and race, shown in the r_{pb} column, indicates that ethnicity was only slightly associated with degree of satisfaction, never accounting for more than 4% of the variance of any single item or factor score.

Table 6 also shows that whites tended to receive somewhat higher ratings in the areas of quality of work, punctuality, common sense, and following instructions, but the relationship to ethnicity here is also quite weak. Therefore, while there is some relationship between ethnicity and both job satisfaction and ratings (as shown by the statistical significance of many of the results), less than 4% of the variance in any given measure of job satisfaction or job performance is explained by ethnic differences.

The intercorrelations of the job satisfaction factors are shown in Table 7. The pattern was similar for both ethnic groups; in no case was the difference between a pair of correlation coefficients statistically significant between the races. The satisfaction factors tended to be appreciably intercorrelated, with the exception of the co-workers factor.

Table 6

Company A: Mean Differences between Ethnic Groups

Item (5=satisfied, 1=dissatisfied)	Black (N=81)	White (N=390)	r_{pb}
I. Advancement			
19. Company is fair in promoting	3.41	2.94	.16**
8. I have a chance of being promoted	3.44	3.26	
14. I'm fairly considered for opening	3.38	3.47	
49. No favoritism played	3.06	2.84	
47. Kept informed of openings	3.05	2.83	
48. Opportunity for more training	3.27	2.82	.14**
33. It's who you know that counts	2.85	2.78	
42. Top management cares about me	3.41	2.89	.16**
31. Expect to get better job here	3.62	3.28	.12**
FACTOR I TOTAL	3.28	3.01	.12**
II. Job and Company			
12. Look forward to coming to work	3.89	3.47	.15**
26. Job dull and boring	3.93	3.60	.13**
45. Job is important to company	4.23	4.04	.10*
44. Friends outside company like my job	4.20	3.98	.12**
10. Feelings about company make me want to do better	4.30	4.02	.12**
17. Getting valuable experience	3.72	3.18	.17**
38. This company is good to work for	4.43	4.23	.10*
41. Chance to use my special abilities	3.25	2.99	
37. Rather not do same job for other company	4.02	4.17	
15. Something new and different happens	3.45	3.25	
52. Like working for this kind of company	3.43	3.45	
FACTOR II TOTAL	3.90	3.67	.15**

(Continued)

Table 6 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	Black (N=81)	White (N=390)	r_{pb}
III. Supervision			
30. Throw weight around	3.38	3.38	
32. Pressure employees	3.30	3.19	
16. Treat you like adults	3.46	3.28	
7. Are good	3.73	3.67	
27. Not on my back	4.14	4.04	
1. Are nice	3.78	3.76	
39. Treat me with respect	4.10	3.89	
29. Listen to employees	3.57	3.33	
18. Take care of complaints	3.23	3.04	
11. Not too much pressure	3.84	3.73	
21. Know their jobs	3.52	3.46	
13. I'm not worried about losing my job	3.62	3.69	
22. Explain new work	3.47	3.13	.11*
FACTOR III TOTAL	3.62	3.51	
IV. Cooperation Among Co-Workers and Supervisors			
6. Cooperation among employees	3.73	3.58	
3. Employees do what supervisor wants	3.77	3.64	
28. Employees get along well with each other	3.84	3.87	
4. Supervisors too easy going	3.99	3.71	.11*
24. Employees do fair share of work	2.34	2.14	
FACTOR IV TOTAL	3.53	3.39	.09*

(Continued)

Table 6 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	Black (N=81)	White (N=390)	r_{pb}
V. Pay and Working Conditions			
23. Can make more in other companies	3.60	3.34	.10*
20. Pay is OK	3.64	3.35	.11*
46. Company provides good equipment	2.88	2.72	
2. Friends outside company earn more	3.31	3.02	.10*
9. Working conditions are OK	3.22	3.01	
43. When hired, was told what job would be like	3.99	3.82	
FACTOR V TOTAL	3.44	3.21	.13**
VI. Miscellaneous Items			
35. Doing good job here will pay off	3.77	3.58	
40. I enjoy working outside	3.74	4.11	-.16**
34. Raw deal on overtime and shift work	4.00	3.99	
51. Company shows personal interest	3.65	3.05	.20**
53. Top management does more than they have to	2.86	2.58	.10*
50. Attention is paid to safety on job	3.23	3.08	
25. New employees get good training	3.41	2.84	.17**
5. Job suits me better than any other	2.58	2.29	
36. Didn't need training	3.47	3.36	
OVERALL SATISFACTION	3.56	3.36	.15**

(Continued)

Table 6 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	Black (N=81)	White (N=390)	r_{pb}
Criterion Ratings (9=high, 1=low)			
Quality of work	5.93	6.28	-.10*
Quantity of work	5.90	6.19	
Attendance	5.33	5.67	
Cooperation with co-workers	6.37	6.50	
Willingness to work	6.02	6.29	
Attitude toward company	6.19	6.27	
Punctuality	5.91	6.72	-.16**
Overall job performance	6.07	6.37	
Common sense	6.04	6.51	-.13**
Ability to follow instructions	6.22	6.79	-.15**
TOTAL	6.00	6.36	-.11*

Note.-Only significant values of r_{pb} are shown. A positive correlation indicates that blacks obtained higher scores, whereas a negative correlation shows that whites did.

$^{*}p < .05$.

$^{**}p < .01$.

Table 7

Company A: Intercorrelations of Job Satisfaction Factor Scores

(Decimal points omitted)

		Job Satisfaction Factors				
		Advancement	Job and Company	Supervision	Co-workers	Pay and Conditions
Advancement	Black	---	54**	60**	16	43**
	White	---	48**	55**	12*	38**
Job and Company	Black		---	58**	18	22*
	White		---	45**	06	41**
Supervision	Black			---	30**	32**
	White			---	13*	48**
Co-worker	Black				---	05
	White				---	11*

*$p < .05$.

**$p < .01$.

The rating criteria were highly intercorrelated, as shown in Table 8, raising some question as to how accurately the raters were able to distinguish among the various traits (especially inasmuch as some of them were highly abstract, such as common sense); this tendency for raters not to differentiate among different traits is rather commonly encountered, and has been called the "halo effect."

The correlations between the satisfaction factors and the rating criteria are shown in Table 9. Overall satisfaction and total performance rating were moderately and positively correlated in both ethnic groups. Satisfaction with supervision and job content were typically positively related to the criteria for both ethnic groups; so, to a somewhat lesser extent, was satisfaction with advancement. Satisfaction with co-workers was positively related to several of the ratings for blacks but not for whites, for whom the correlations were generally in the inverse direction; five of the differences between pairs of these correlations were statistically significant between the races. For the pay satisfaction factor, several correlations for white employees were statistically significant but small in absolute value, indicating a weak positive relationship between satisfaction with pay and ratings; correlations between these variables for black employees were generally negative in direction but not statistically significant, and only one difference between paired correlations was significant between the two races. Older employees received somewhat higher ratings in both ethnic groups; age was more strongly related to ratings of quality of work and following instructions for blacks than whites. Tenure (length of service) was generally not correlated with ratings in either ethnic group.

Table 8

Company A: Intercorrelations among Rating Criteria

		Rating Criteria[a]									
		Quality	Quantity	Attendance	Cooperation	Willingness	Company Attitude	Punctuality	Overall Job	Common Sense	Follow Instr.
Quality of work	Black	--	78	34	68	72	54	48	76	70	65
	White	--	79	41	65	69	52	49	81	68	70
Quantity of work	Black		--	39	65	74	49	46	75	62	63
	White		--	42	64	81	62	51	86	63	64
Attendance	Black			--	46	48	46	63	39	28	21
	White			--	48	51	48	64	48	40	35
Cooperation	Black				--	76	69	52	78	65	62
	White				--	76	71	50	74	70	72
Willingness	Black					--	71	62	79	54	54
	White					--	77	55	84	64	65

(Continued)

Table 8 (Cont'd)

		Rating Criteria[a]									
		Quality	Quantity	Attendance	Cooperation	Willingness	Company Attitude	Punctuality	Overall Job	Common Sense	Follow Instr.
Attitude to Company	Black						--	54	62	46	43
	White						--	52	69	63	57
Punctuality	Black							--	53	38	28
	White							--	58	48	47
Overall Job	Black								--	82	78
	White								--	71	75
Common sense	Black									--	90
	White									--	80

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[a] All correlations significant at the .01 level except the following ones for blacks: attendance--common sense (significant at the .05 level), attendance--following instructions (not significant), and punctuality--following instructions (significant at the .05 level).

Table 9

Correlations of Job Satisfaction and other Variables with Rating Criteria

Variable		Quality	Quantity	Attendance	Cooperation	Willingness	Company Attitude	Punctuality	Overall Job	Common Sense	Follow Instr.	Total
Advancement	Black	-05	15	25*	06	25*	29**	22*	07	-06	-11	15
	White	14**	22**	30**	24**	27**	26**	21**	24**	14**	13*	27**
Job and company	Black	21	32**	37**	29**	40**	36**	[45**]	25*	08	06	37**
	White	17**	25**	19**	16**	24**	22**	[15**]	20**	15**	11*	23**
Supervision	Black	13	22*	26*	20	43**	38**	34**	22*	06	05	30**
	White	20**	26**	33**	24**	32**	28**	26**	24**	21**	17**	32**
Co-workers	Black	-01	06	14	[27*]	[31**]	[29**]	[16]	10	00	01	[18]
	White	-13*	-10*	-04	[-02]	[07]	[-05]	[-09]	-12*	-17**	-07	[-10*]
Pay and condition	Black	[-26*]	-14	13	-05	-05	07	04	-19	-19	-19	-09
	White	[03]	09	19**	08	13*	15**	14**	05	07	-03	12*

(Continued)

Table 9 (Cont'd)

Variable		Quality	Quantity	Attendance	Cooperation	Willingness	Attitude	Punctuality	Overall Job	Common Sense	Follow Instr.	Total
		Rating Criterion										
Overall satisfaction	Black	03	20	34**	20	41**	40**	36**	15	-02	-05	28*
	White	16**	26**	33**	24**	31**	29**	24**	23**	17**	13**	30**
Age	Black	[42**]	27*	02	25*	28*	10	16	33**	28*	[30**]	29**
	White	[12*]	11*	18**	06	14**	19**	21**	10*	14**	[06]	17**
Company Tenure	Black	[31**]	06	-12	06	04	-07	-02	15	16	16	08
	White	[04]	00	04	-06	-04	00	01	-02	05	00	-01

Note.-A bracket around a pair of correlation coefficients indicates that they are significantly different. Decimal points omitted.

*p < .05.

**p < .01.

Correlations between age and tenure and the satisfaction dimensions are shown in Table 10. Only one result is statistically significant: for both ethnic groups, employees longer on the job are somewhat less satisfied with advancement opportunities. This may indicate that newer employees have high hopes regarding chances for promotion, and become somewhat disenchanted (or realistic) as they remain longer on the job.

Table 10

Company A: Correlations between Age and Tenure and Satisfaction Dimensions

Variable		Satisfaction Dimension					
		Advancement	Job	Supervision	Co-workers	Pay	Overall
Age	Black	01	13	17	-09	-05	08
	White	04	10	17	-14	12	12
Tenure	Black	-25*	-08	-01	-12	-14	-18
	White	-27**	-09	-06	-12	-07	-18

Note.- Decimal points omitted.

*p < .05.

**p < .01.

Table 11

Pooled Sample: Mean Differences between Ethnic Groups on Satisfaction Items

Item (5=satisfied, 1=dissatisfied)	Black (N=101)	White (N=87)	r_{pb}
I. Advancement			
8. Chance of promotion	3.15	2.58	.20*
12. Company fair in promoting	3.05	2.72	
24. Expect better job here	3.87	3.17	.25*
28. Advancement and seniority	2.92	2.77	
ADVANCEMENT DIMENSION	3.21	2.84	.21**
II. Job			
5. Can show what I can do	2.93	2.76	
10. Get valuable experience	3.60	3.13	.17*
19. Job too dull and boring	3.54	3.19	
JOB DIMENSION	3.31	3.02	.15*
III. Supervision			
4. Boss treats some too well	3.28	2.85	.15*
7. All in all, boss is good	3.91	3.71	
9. Boss is nice guy	3.78	3.57	
11. Boss and complaints	3.32	3.31	
14. Boss knows his stuff	3.64	3.53	
15. Boss explains new work	3.47	3.31	

(Continued)

2. Remaining Companies

The data for the remaining companies (B through G) were analyzed in a manner similar to that described in the preceding section for the Company A sample. An exception is that a factor analysis was not performed of the questionnaire items, mainly because the total number of cases was too small relative to the number of items to yield stable factors; moreover, a factor analysis of these data would not be likely to yield new information since the results of the Company A analysis indicate the meaningfulness and stability of the attitude dimensions of the questionnaire. A later section will describe factor analyses of questionnaires separately for the two ethnic groups, using data from all companies combined.

The questionnaire data were analyzed both for all companies combined (exclusive of Company A) and separately for four companies (B through E) which had contributed enough cases to make such an analysis meaningful. The results of analyzing the pooled data will be presented first, followed by the analyses of the four separate companies.

(a) Pooled Sample

The data consisted of the questionnaire completed by 101 black and 87 white employees from six companies. As can be seen from Table 11, these employees on the whole expressed themselves as intermediate between being satisfied and dissatisfied with their employment; relatively speaking, they were particularly satisfied with their supervisors and somewhat dissatisfied with their pay.

Table 11 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	Black (N=101)	White (N=87)	r_{pb}
III. Supervision (cont'd)			
18. Boss gives good training	3.45	3.19	
20. Boss always on our backs	3.56	3.55	
22. Boss listens to workers	3.51	3.33	
23. Boss throws weight around	3.67	3.46	
25. Boss puts on pressure	3.36	3.15	
29. Boss says "do something"	4.11	3.64	.26**
SUPERVISION DIMENSION	3.50	3.35	
IV. Co-workers			
6. Cooperation among workers	3.84	3.38	.19*
17. Some don't do fair share	2.55	2.37	
21. Co-workers get along well	3.99	3.69	
32. Some get away with murder	2.54	2.22	
CO-WORKERS DIMENSION	3.22	2.90	.19**
V. Pay			
2. Not paid enough	2.44	2.72	
13. Pay is OK	2.68	2.52	
16. Get more pay elsewhere	2.53	2.54	
PAY DIMENSION	2.63	2.64	

(Continued)

Table 11 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	Black (N=101)	White (N=87)	r_{pb}
VI. Other			
1. Working conditions	3.42	3.28	
3. Shift and overtime work	3.75	3.61	
26. It's who you know	3.01	2.72	
27. Can dress and act OK	3.42	3.58	
30. Doing well will pay off	3.87	3.01	.30**
31. Family likes my job	3.95	3.61	
33 Expect to be here in one year	4.15	3.80	
OVERALL SATISFACTION	3.29	3.09	.16*

Note.- Only statistically significant values of r_{pb} are shown. A positive correlation indicates blacks were more satisfied; a negative correlation indicates whites were more satisfied.

*p < .05.

**p < .01.

An analysis of differences between mean scores of the two ethnic groups yielded statistically significant differences for six items and three dimensions, plus total satisfaction, thus exceeding chance expectation. The black employees were somewhat more satisfied with almost all the items shown in Table 11, but the corresponding values of r_{pb} even for items showing a significant difference indicate that the strength of the relationship between ethnic group and satisfaction is fairly weak. The intercorrelations between satisfaction dimensions tended to be moderately high and positive for both ethnic groups (see Table 12).

Table 13 reports the attitudes of both ethnic groups toward the items relating to topics other than job satisfaction. In general, the two groups were rather similar in these respects. Both groups evaluated their job performance rather favorably; if blacks have somewhat greater self-doubts, as has been suggested, this tendency is not supported by these data. In their expectations concerning the consequences of effective performance, blacks were somewhat more optimistic than whites that performance would pay off in terms of getting ahead and getting along with one's boss; both groups were equally optimistic about its facilitation of good relations with co-workers and somewhat uncertain about the effects on their pay level. Both groups were quite similar in their assessment of the importance of various general life goals, with happy family life, self-improvement, and a good job ranking relatively high whereas enjoyment of spare time and friends got relatively low rankings. Ratings of the importance of various job features were also generally similar, with pay at the top and opportunity for a better job elsewhere at the bottom; blacks gave promotion

Table 12

Pooled Sample: Intercorrelations among Satisfaction Dimensions

Dimension		Pay	Job	Co-workers	Advancement	Supervisor
Pay	Black	---	32**	15	26**	16
	White	---	07	42	26*	34**
Job	Black		---	35**	52**	53**
	White		---	23*	46**	38**
Co-workers	Black			---	30**	56**
	White			---	27*	41**
Advancement	Black				---	41**
	White				---	41**

$^{*}p < .05$.

$^{**}p < .01$.

Table 13

Pooled Sample: Mean Differences between Ethnic Groups--Other Items

Item	Black (N=101)	White (N=87)	r_{pb}
Self-rated Criteria (4=high, 1=low)			
34. Quantity of work	3.11	2.98	
35. Quality of work	3.07	3.01	
36. Punctuality	3.31	3.28	
37. Attendance	3.04	3.26	
38. Overall	3.04	3.01	
39. Ease of finding new job	3.33	3.34	
40. Past experience	3.10	3.00	
General Importance[a] (3=ranked among 2 most important, 1=ranked among 2 least important)			
Improve myself	2.41	2.46	
Enjoy spare time	1.43	1.44	
Have a good job	2.30	2.45	
Have a nice house	1.96	1.82	
Have a happy family life	2.56	2.33	
Have nice friends	1.40	1.61	
Educate children	2.18	2.12	
Expectancies (3=good chance, 1=little chance)			
43. Getting ahead	2.20	1.95	.17*
44. Getting along with boss	2.58	2.33	.19**
45. More pay	2.08	1.91	
46. Getting along with co-workers	2.67	2.51	
47. Better job elsewhere	2.16	2.14	
48. Things you really want	2.45	2.33	

Table 13 (Cont'd)

Item	Black (N=101)	White (N=87)	r_{pb}
Job Aspect Importance (3=very important, 1=not important)			
49. More pay	2.77	2.67	
50. Being promoted	2.66	2.48	.16*
51. Getting along with co-workers	2.56	2.44	
52. Better job elsewhere	1.76	1.72	
53. Getting along with boss	2.32	2.38	
Non-Job Satisfactions (4=like, 1-dislike)			
54. Spare time	3.45	3.47	
55. Family life	3.71	3.48	.17*
56. Friends away from job	3.23	3.29	
57. Community activities	2.55	2.16	.21**
58. Children's education	3.28	3.20	
59. Life in general	3.39	3.46	

Note.-Only significant values of r_{pb} are shown. A positive correlation indicates blacks were higher; a negative correlation indicates whites were higher.

[a] Significance tests were not run for these questions.

$^{*}p < .05$.

$^{**}p < .01$.

a significantly higher rating than did whites. Blacks expressed higher satisfaction with two non-occupational aspects of their lives, family life and community activities, although for both groups the latter was relatively the least liked aspect; both blacks and whites expressed general satisfaction with their lives in general.

Correlations between satisfaction dimensions and self-rated criteria are shown in Table 14; these results should be interpreted with caution, as the criteria consisted of single ratings of the employee's own opinion of his job performance. In general, correlations between satisfaction and these self-ratings were smaller and less consistent than found in Company A with supervisor's ratings. For whites, a significant negative relationship was observed between satisfaction with the job content and three of the self-rated criteria (quantity of work, quality of work, and overall rating). That is, whites who said they liked the work more gave themselves poorer ratings on how well they were doing their jobs. This was not true of black employees, and the correlations for white and black employees were significantly different with regard to these three self-rated criteria. No clear reason is apparent for the existence of a black-white difference in the correlations with this one dimension of satisfaction.

Correlations between age and tenure and the satisfaction dimensions are shown in Table 15; they are in general not similar to the Company A sample. In the pooled sample, there was a significant positive correlation between age and satisfaction with the job for both ethnic groups, and between tenure and satisfaction with the job for whites. Also, older blacks were more satisfied with the supervisor than younger blacks, while

Table 15

Pooled Sample: Correlations between Age and Tenure and Satisfaction Dimensions

Variable		Advancement	Job	Supervision	Co-workers	Pay	Overall
		Satisfaction Dimensions					
Age	Black	18	22*	28**	13	-09	25**
	White	09	26*	16	14	08	19
Tenure	Black	-09	16	03	-07	-23*	-03
	White	04	21*	20	-05	06	15

Note.-Decimal points omitted.

*p < .05.

**p < .01.

blacks with more tenure were less satisfied with the pay than blacks with less tenure. It should be noted, however, that all of these correlations are small, indicating that the relationships in question are fairly weak. Other correlations in Table 15 were not statistically significant.

Few significant correlations were obtained between other biographical measures included in the questionnaire and work attitudes. For whites, level of father's job (as coded on a five-point scale by a rater) was correlated .48 with satisfaction with supervision. (The corresponding correlation for blacks was .10.) For blacks, greater father's education tended to correspond to lower satisfaction with co-workers ($r = -.24$) and supervision ($r = -.23$), while for whites, greater father's education tended to correspond to greater satisfaction with co-workers ($r = .25$) and supervision ($r = .23$). The difference between each of these pairs of correlation coefficients is statistically significant.

(b) Companies B,C,D, and E.

The beneficial effects of pooling the data (as above) on the power of a statistical test may be estimated by using techniques given by Cohen (1969). With samples of each ethnic group of size 20, the probability of detecting a true significant difference between the means of the populations from which the samples were drawn is only about one in three. Consequently, a non-significant finding is not very persuasive negative evidence, since the ability of the statistical test to detect differences with such small samples is quite poor. With pooled samples of sizes 100 and 80, however, the probability of detecting a true significant difference between the means improves to approximately 9 in 10. Thus, non-significant findings can be interpreted with much more confidence in the case of the pooled sample, above, than in the case of the separate samples to be presented below. One caution must be observed, however, in dealing with the pooled data: differences between companies in opposite directions may be canceled out by the pooling. For example, if blacks in one company are significantly higher in satisfaction with pay, whereas whites in a second company are significantly higher in satisfaction with pay, the pooled data will obscure these differences and indicate no significant difference between the ethnic groups with regard to pay satisfaction. Consequently, the pooled data should be considered together with the data of the individual companies below.

Two cautions must be kept in mind when interpreting these data. First, a great many significance tests were run. About 5 of every 100 such tests will be significant at the .05 level solely due to chance, and there is no way to tell which of the significant findings are meaningful and which are chance. Second, the probability of obtaining statistical significance (i.e., the power of the statistical test) is low when sample sizes are small. Thus, items for which significant differences were not obtained do not provide very strong evidence that there is not in fact a difference between the populations from which the samples are drawn; the only justifiable conclusion in such instances is the conservative one that there is not sufficient reason to assume that there is a difference between the population means. To help circumvent this latter difficulty, differences significant at the .10 level of significance have also been identified; this less stringent significance criterion renders a Type I Error more probable--that is, falsely concluding that there is a difference between the ethnic groups--but decreases the probability of a Type II Error, or failing to detect a true difference between the ethnic groups. In the present research, the consequences of a Type II Error are sufficiently serious to warrant inclusion of the .10 significance criterion with these small samples.

The satisfaction items (Table 16) indicated that blacks at Company B were less satisfied than the whites with supervision and opportunities for promotion; blacks at Company D were somewhat more satisfied than whites, particularly with regard to the co-worker dimension; and few differences between blacks and whites were observed at Companies C or E.

The expectancy and other items are reported in Table 17. Here, blacks in Company B were less confident than whites that promotions and supervision would be better if they did a better job. Opposite findings regarding supervision and co-workers were found in Company C, and opposite findings regarding advancement also occurred in Company E. Also, blacks generally reported greater satisfaction with non-job community activities, as reported in the previous section dealing with the pooled data.

Table 18 shows that the above-noted differences between companies in the results of black-white comparisons were statistically significant in the case of 14 of the items and two of the satisfaction dimensions, indicating that the relatively lower levels of satisfaction of blacks at Company B and higher levels at Company D were probably not just chance results.

Table 16

Remaining Companies: Mean Differences between Ethnic Groups
on Satisfaction Items and Dimensions

Item (5=satisfied, 1=dissatisfied)	Company B Black (N=21)	Company B White (N=25)	Company B r_{pb}	Company C Black (N=34)	Company C White (N=11)	Company C r_{pb}	Company D Black (N=18)	Company D White (N=17)	Company D r_{pb}	Company E Black (N=19)	Company E White (N=26)	Company E r_{pb}
I. Advancement												
8. Chance of promotion	2.31	3.60	-.41**	2.72	3.56	-.27[a]	3.27	2.43		3.11	2.73	
12. Company fair in promoting	2.71	3.45		2.63	2.71		2.93	2.50		3.21	3.04	
24. Expect better job here	3.41	3.73		3.73	3.70		3.71	2.45	.44**	4.16	3.04	.43**
28. Advancement and seniority	1.75	2.46		3.45	3.50		3.27	4.14	-.36*	2.47	2.38	
ADVANCEMENT DIMENSION	2.65	3.26	-.28[a]	3.12	3.32		3.22	2.94		3.31	2.78	.28[a]
II. Job												
5. Can show what I can do	2.63	3.19		2.72	2.78		2.80	3.00		3.05	2.88	
10. Get valuable experience	3.28	3.64		3.40	2.60		4.47	3.43	.44*	3.21	2.92	
19. Job too dull and boring	3.17	3.40		3.89	3.33		4.00	3.38		3.05	2.92	
JOB DIMENSION	3.02	3.38		3.28	2.91		3.63	3.23		3.10	2.91	
III. Supervision												
4. Boss treats some too well	2.17	2.92	-.30*	3.54	3.36		3.20	3.53		3.11	2.88	
7. All in all, boss is good	2.87	4.12	-.41*	3.56	3.91		4.34	4.00		3.63	3.88	
9. Boss is nice guy	2.86	3.85	-.28[a]	3.50	3.44		4.33	3.88	.33[a]	3.47	3.73	

(Continued)

Table 16 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	Company B Black (N=21)	Company B White (N=25)	Company B r_{pb}	Company C Black (N=34)	Company C White (N=11)	Company C r_{pb}	Company D Black (N=18)	Company D White (N=17)	Company D r_{pb}	Company E Black (N=19)	Company E White (N=26)	Company E r_{pb}
III. Supervision (cont'd)												
11. Boss and complaints	3.13	3.26		3.25	3.30		3.81	3.67		3.21	3.04	
14. Boss knows his stuff	3.07	3.71		3.80	3.56		3.93	4.07		3.05	3.42	
15. Boss explains new work	2.89	3.52		3.68	3.80		3.94	3.80		2.53	2.92	
18. Boss gives good training	3.28	3.04		3.57	3.20		4.25	3.75		2.95	2.73	
20. Boss always on our backs	3.29	3.16		3.47	3.55		4.06	4.24		3.47	2.96	
22. Boss listens to workers	2.95	3.08		3.72	3.78		4.00	3.63		3.37	3.15	
23. Boss throws weight around	2.64	3.73	-.35*	3.46	3.89		4.06	4.25		3.53	3.08	
25. Boss puts on pressure	2.50	3.14		3.40	3.00		3.93	4.13		2.95	2.81	
29. Boss says "do something"	3.61	3.83		4.37	3.50	.49**	4.18	3.87		3.84	3.46	
SUPERVISION DIMENSION	2.96	3.40		3.50	3.46		3.88	3.84		3.18	3.17	
IV. Co-workers												
6. Cooperation among workers	3.61	3.37		3.84	3.90		4.24	3.24	.45**	3.68	3.00	.26[a]
17. Some don't do fair share	2.16	2.08		2.30	2.40		3.38	2.13	.45*	2.58	2.50	
21. Co-workers get along well	3.45	3.79		4.00	3.50		4.50	3.93	.47**	3.74	3.54	
32. Some get away with murder	1.59	2.31		2.67	3.25		2.62	2.44		2.42	2.00	
CO-WORKERS DIMENSION	2.75	2.89		3.20	3.16		3.61	2.87	.47**	3.11	2.76	

(Continued)

Table 16 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	Company B Black (N=21)	Company B White (N=25)	Company B r_{pb}	Company C Black (N=34)	Company C White (N=11)	Company C r_{pb}	Company D Black (N=18)	Company D White (N=17)	Company D r_{pb}	Company E Black (N=19)	Company E White (N=26)	Company E r_{pb}
V. Pay												
2. Not paid enough	2.50	2.63		2.59	2.75	-.32*	2.17	2.71		2.58	2.65	
13. Pay is OK	2.17	2.85		2.77	2.88		2.22	2.50		2.95	2.62	
16. Get more pay elsewhere	2.13	2.65		2.95	2.90		1.40	2.36	-.46**	2.95	2.85	
PAY DIMENSION	2.38	2.75		2.83	3.12		2.02	2.59	-.31[a]	2.82	2.73	
VI. Other												
1. Working conditions	3.26	3.23		3.71	4.00		4.25	3.65		2.32	2.81	
3. Shift and overtime work	3.59	4.04		3.48	3.44		4.25	4.20		3.26	3.23	
26. It's who you know	2.14	3.38	-.38*	2.88	3.14		3.00	2.77		2.47	2.69	
27. Can dress and act OK	3.63	3.71		3.33	3.18		3.93	3.73		3.05	3.42	
30. Doing well will pay off	3.00	3.91		3.97	2.70	.40**	3.93	2.92		3.68	2.88	.29[a]
31. Family likes my job	3.74	3.92		4.28	3.40	.34*	3.73	3.70		3.63	3.27	
33. Expect to be here in 1 year	4.19	4.22		4.00	3.89		4.62	3.86	.37*	3.79	3.54	
OVERALL JOB SATISFACTION	2.82	3.22		3.29	3.29		3.49	3.34		3.14	2.97	

Note.-Only significant values of r_{pb} are shown. A positive correlation indicates blacks were more satisfied; a negative correlation indicates whites were more satisfied. Correlations of equal magnitude may differ in statistical significance for different items due to unequal N's caused by missing data.

[a] $p < .10$; $^{*}p < .05$; $^{**}p < .01$.

Table 17

Remaining Companies: Mean Differences between Ethnic Groups--Other Items

Item	Company B			Company C			Company D			Company E		
	Black (N=21)	White (N=25)	r_{pb}	Black (N=34)	White (N=11)	r_{pb}	Black (N=18)	White (N=17)	r_{pb}	Black (N=19)	White (N=26)	r_{pb}
Self-rated Criteria (4=high, 1=low)												
34. Quantity of work	2.79	2.85		3.35	2.89	.25[a]	3.17	3.11		2.95	3.00	
35. Quality of work	3.00	2.78		3.22	3.11		3.22	3.06		2.84	2.88	
36. Punctuality	3.00	3.52		3.06	3.33		3.56	3.47		3.05	3.19	
37. Attendance	2.74	2.88		2.84	3.10		3.22	3.65		3.26	3.27	
38. Overall	3.00	2.69		3.19	2.78		3.22	3.12		3.05	3.00	
39. Ease of finding new job	3.37	3.30		3.44	3.36		3.17	3.35		3.26	3.27	
40. Past experience	3.00	3.03		3.12	3.10		3.25	3.29		3.00	2.69	
General Importance[b] (3=ranked among 2 most important; 1=ranked among 2 least important)												
Improve myself	2.2	2.5		2.4	2.3		2.3	2.4		2.4	2.7	
Enjoy spare time	1.2	1.6		1.3	1.4		1.3	1.5		1.5	1.7	
Have a good job	2.7	2.2		2.4	2.2		2.3	2.5		2.3	2.5	
Have a nice house	1.9	1.7		2.0	1.8		2.2	1.8		1.9	1.8	
Have a happy family life	2.3	2.6		2.5	2.6		2.6	2.4		2.6	2.2	

(Continued)

Table 17 (Cont'd)

Item	Company B			Company C			Company D			Company E		
	Black (N=21)	White (N=25)	r_{pb}	Black (N=34)	White (N=11)	r_{pb}	Black (N=18)	White (N=17)	r_{pb}	Black (N=19)	White (N=26)	r_{pb}
General Importance (cont'd)												
Have nice friends	1.3	1.5		1.4	1.1		1.2	1.9		1.4	1.7	
Educate children	2.5	2.2		2.1	2.5		2.3	1.9		2.2	1.8	
Expectancies (3=good chance, 1=little chance)												
43. Getting ahead	1.85	2.37	-.30*	2.00	2.30		2.17	1.76		2.42	1.96	.33*
44. Getting along with boss	2.10	2.74	-.45*	2.52	2.00	.30*	2.61	2.59		2.39	2.40	
45. More pay	2.00	2.30		1.97	2.00		1.67	1.59		2.22	2.04	
46. Getting along with co-workers	2.53	2.70		2.82	2.40	.30*	2.56	2.17		2.50	2.63	
47. Better job elsewhere	2.32	2.12		2.23	1.90		2.24	1.94		2.00	2.20	
48. Things you really want	2.42	2.26		2.50	2.20		2.50	2.24		2.61	2.32	
Job Aspect Importance (3=very important, 1=not important)												
49. More pay	2.75	2.67		2.74	2.60		2.88	2.63		2.79	2.69	
50. Being promoted	2.75	2.63		2.65	2.40		2.78	2.19	.42*	2.50	2.36	
51. Getting along with co-workers	2.42	2.56		2.65	2.45		2.56	2.47		2.31	2.40	
52. Better job elsewhere	2.00	1.80		1.85	1.70		1.78	1.64		1.59	1.72	
53. Getting along with boss	2.26	2.22		2.47	2.40		2.39	2.53		2.12	2.32	

(Continued)

Table 17 (Cont'd)

Item	Company B			Company C			Company D			Company E		
	Black (N=21)	White (N=25)	r_{pb}	Black (N=34)	White (N=11)	r_{pb}	Black (N=18)	White (N=17)	r_{pb}	Black (N=19)	White (N=26)	r_{pb}
Non-Job Satisfaction (4=like, 1=dislike)												
54. Spare time	3.47	3.38		3.38	3.10		3.59	3.75		3.61	3.52	
55. Family life	3.53	3.65		3.76	3.70		3.72	3.56		3.74	3.36	
56. Friends away from job	3.06	3.31		3.26	2.70	.31*	3.17	3.31		3.22	3.50	
57. Community activities	2.53	2.00	.34*	2.78	1.90	.40**	2.50	2.12		2.94	1.84	.56*
58. Children's education	3.24	3.20		3.29	3.78		3.53	3.50		3.39	2.76	.29[a]
59. Life in general	3.50	3.33		3.19	3.50		3.44	3.63		3.56	3.36	

Note.-Only significant values of r_{pb} are shown. A positive correlation indicates blacks were higher; a negative correlation indicates whites were higher.

[a] $p < .10$; [*] $p < .05$; [**] $p < .01$.

[b] Significance tests were not run for these questions.

Table 18

Items and Dimensions for which Significant Differences Exist between Remaining Companies[a]

Item	Co.B vs. Co.C			Co.B vs. Co.D			Co.C vs. Co.D		
	r_{pb}	r_{pb}	p	r_{pb}	r_{pb}	p	r_{pb}	r_{pb}	p
1. Working conditions							-.12	.33	.10
6. Cooperation among employees				.04	.45	.10	-.02	.45	.05
7. Boss is good				-.41	.19	.05			
8. Chance of promotion				-.41	.29	.01	-.27	.29	.05
9. Boss is nice guy				-.28	.33	.05			
10. Getting valuable experience				-.06	.44	.05			
21. Co-workers get along well				-.08	.47	.05			
24. Expect better job here				-.06	.44	.05	.01	.44	.10
26. It's who you know that count				-.38	.08	.10			
29. Boss says "do something"	-.08	.49	.05						
30. Doing well will pay off	-.23	.40	.01	-.23	.32	.05			
43. Expectancy of getting ahead				-.30	.27	.05	-.17	.27	.10
44. Expectancy of getting along with boss	-.45	.30	.01	-.45	.02	.05			
56. Like friends away from job	-.15	.31	.05						
CO-WORKER SATISFACTION				-.03	.47	.05	.03	.47	.10
ADVANCEMENT SATISFACTION				-.28	.17	.05			

Note.-A positive r_{pb} indicates that blacks were higher on the items; a negative r_{pb} indicates that whites were higher. Differences between correlations of equal magnitude may differ with regard to statistical significance due to missing data.

[a] Only five of the inter-company comparisons involving Company E yielded statistically significant results. To simplify the table, these are merely noted below, with the corresponding p shown in parentheses: Item 24, r_{pb} = .43, compared to Company B (.05) and compared to Company C (.10); Item 30, r_{pb} = .29, compared to Company B (.05); Item 43, r_{pb} = .33, compared to Company B (.01); and the advancement dimension, r_{pb} = .28, compared to Company B (.05).

3. Sample of Females from Company D

Although the focus of this study concerns the job attitudes of male employees, responses obtained from a sample of 69 female employees at Company D were analyzed at the request of this company. The mean differences between the female black and white employees in this company, shown in Tables 19 and 20, may be compared with the corresponding data for Company D male employees shown in Tables 16 and 17. Unlike the males, white females tended to be more satisfied than blacks. Black females were particularly less satisfied with their pay. This may be due to the considerably longer job tenure of the white females than the blacks (see Table 20); longer tenured employees generally earn more pay than workers with less tenure, and those very dissatisfied with the pay probably terminate before achieving long tenure. Table 20 also reveals appreciable differences between the two ethnic groups of women in their ratings of the importance of various features of jobs; the black women placed relatively higher value on pay, promotion, and participation for a better job elsewhere, whereas whites placed relatively higher value on cordial relations with their co-workers and supervisors.

Table 19

Company D Female Employees: Mean Differences between Ethnic Groups on Satisfaction Items

Item (5=satisfied, 1=dissatisfied)	Black (N=35)	White (N=34)	r_{pb}
I. Advancement			
8. Chance of promotion	2.79	3.22	
12. Company fair in promoting	3.14	3.39	
24. Expect better job here	2.50	2.32	
28. Advancement and seniority	2.50	3.10	
ADVANCEMENT DIMENSION	2.79	3.03	
II. Job			
5. Can show what I can do	3.38	3.97	-.23[a]
10. Get valuable experience	3.77	3.77	
19. Job too dull and boring	3.70	3.69	
JOB DIMENSION	3.55	3.71	
III. Supervision			
4. Boss treats some too well	3.56	3.40	
7. All in all, boss is good	4.38	4.55	
9. Boss is nice guy	4.36	4.32	
11. Boss and complaints	3.55	3.93	
14. Boss knows his stuff	4.08	4.07	
15. Boss explains new work	3.55	4.15	-.25*

(Continued)

Table 19 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	Black (N=35)	White (N=34)	r_{pb}
III. Supervision (cont'd)			
18. Boss gives good training	3.76	3.71	
20. Boss always on our backs	4.09	4.15	
22. Boss listens to workers	3.77	3.81	
23. Boss throws weight around	4.38	4.34	
25. Boss puts on pressure	3.73	3.87	
29. Boss says "do something"	3.39	3.45	
SUPERVISION DIMENSION	3.79	3.91	
IV. Co-workers			
6. Cooperation among workers	3.67	3.81	
17. Some don't do fair share	2.44	2.68	
21. Co-workers get along well	3.77	3.61	
32. Some get away with murder	2.53	2.46	
CO-WORKERS DIMENSION	3.08	3.15	
V. Pay			
2. Not paid enough	3.19	3.68	
13. Pay is OK	2.04	3.00	-.36**
16. Get more pay elsewhere	1.92	2.27	
PAY DIMENSION	2.53	3.05	-.31**

(Continued)

Table 19 (Cont'd)

Item (5=satisfied, 1=dissatisfied)	Black (N=35)	White (N=34)	r_{pb}
VI. Other			
1. Working conditions	3.70	3.12	.23[a]
3. Shift and overtime work	4.16	3.90	
26. It's who you know	2.84	3.00	
27. Can dress and act OK	3.88	4.34	-.22[a]
30. Doing well will pay off	3.32	3.89	-.24[a]
31. Family likes my job	3.73	4.35	-.36**
33. Expect to be here in one year	3.91	4.53	-.31*
OVERALL SATISFACTION	3.35	3.54	

Note.-Only significant values of r_{pb} are shown. A positive correlation indicates blacks were more satisfied; a negative correlation indicates whites were more satisfied. Correlations of equal magnitude may differ in statistical significance for different items due to unequal N's caused by missing data.

[a] $p < .10$.

*$p < .05$.

**$p < .01$.

Table 20

Company D Female Employees: Mean Differences between Ethnic Groups--Other Items

Item	Black (N=35)	White (N=34)	r_{pb}
Self-rated Criteria (4=high, 1=low)			
34. Quantity of work	3.14	2.97	
35. Quality of work	3.17	3.21	
36. Punctuality	3.11	3.27	
37. Attendance	3.09	3.27	
38. Overall	3.21	3.18	
39. Ease of finding new job	3.34	3.39	
40. Past experience	3.15	2.86	
General Importance[b] (3=ranked among 2 most important, 1=ranked among 2 least important)			
Improve myself	2.4	2.2	
Enjoy spare time	1.2	1.2	
Have a good job	2.4	2.3	
Have a nice house	2.1	1.8	
Have a happy family life	2.4	2.7	
Have nice friends	1.3	1.8	
Educate children	2.3	2.3	
Expectancies (3=good chance, 1=little chance)			
43. Getting ahead	1.91	1.85	
44. Getting along with boss	2.57	2.82	-.24*
45. More pay	1.70	1.76	
46. Getting along with co-workers	2.70	2.76	
47. Better job elsewhere	2.32	2.18	
48. Things you really want	2.62	2.42	

(Continued)

Table 20 (Cont'd)

Item	Black (N=35)	White (N=34)	r_{pb}
Job Aspect Importance (3=very important, 1=not important)			
49. More pay	2.86	2.50	.36**
50. Being promoted	2.38	1.94	.29*
51. Getting along with co-workers	2.46	2.74	-.2[illegible]
52. Better job elsewhere	1.88	1.35	.36**
53. Getting along with boss	2.46	2.71	-.22[a]
Non-Job Satisfactions (4=like, 1=dislike)			
54. Spare time	3.41	3.39	
55. Family life	3.79	3.94	
56. Friends away from the job	3.21	3.47	
57. Community activities	2.66	2.03	.32**
58. Children's education	3.31	3.50	
59. Life in general	3.45	3.59	
Age	29.1	37.4	-.37**
Tenure	19.9	98.8	-.48**

Note.-Only significant values of r_{pb} are shown. A positive correlation indicates blacks were higher; a negative correlation indicates whites were higher.

[b] Significance tests were not run for these questions.

[a] $p < .10$.

[*] $p < .05$.

[**] $p < .01$.

4. Factor Analysis of Separate Ethnic Groups Using All Male Employees

To further clarify the nature of similarities and differences in job attitudes between the ethnic groups, separate factor analyses of satisfaction items of all 182 black male employees and all 477 while male employees were performed. This was done by identifying 27 satisfaction items that were sufficiently similar in the Company A questionnaire and the questionnaire used in other companies to allow the data for these items to be combined across all companies. The common items were (see Appendices C and E):

	Company A Questionnaire	Questionnaire used at other companies
Supervision:	7	7
	1	9
	18	11
	21	14
	22	15
	25	18
	27	20
	29	22
	30	23
	32	25
	3	29
Pay:	20	13
	23	16
Advancement:	8	8
	19	12
	31	24
Co-workers:	6	6
	24	17
	28	21
Work itself:	41	5
	17	10
	26	19
Miscellaneous:	9	1
	34	3
	33	26
	35	30
	44	31

The data were factor analyzed by the principal axis method and Varimax rotation. The results are shown in Tables 21 and 22. Since the Company A data comprises about 80% of the white sample and 50% of the black sample, it is not surprising that most of the factors obtained are similar to those in Table 5 (and, as was mentioned in connection with Table 5, were the ones the questionnaire was designed to tap). However, in that analysis, white and black samples were not differentiated. The present analysis reveals that the factor structures for whites and blacks are quite similar; common factors included supervision, co-workers, pay, and advancement. There were, however, several interesting differences between the ethnic groups:

(a) A factor labelled "future payoff" emerges in the black sample but is absent in the white sample. This factor is characterized by a different set of items than the advancement factor (which also is present in the whites); conceptually, the advancement factor seems more to reflect advancement policy and opportunity, whereas "future payoff" appears to have a more interpersonal reference including the influence of family, co-workers, and especially the supervisor. The percentage of common variance attributable to these two factors is nearly 20% in the black sample, but advancement accounts for only 9% in the white sample.

(b) The factor of the work itself, which appears in the data from whites, is absent from the factor analysis of the blacks; the items defining that factor in the white sample are linked with other factors in the black sample. For example, "getting valuable experience" is associated mainly with advancement; "the job is dull and boring" mainly with pay, and "raw deal on shift work" mainly with supervision.

Table 21

Factor Analysis of Satisfaction Items of 477 White Male Employees*

Factor I. Supervision (17.2%)**	
23. Boss throws weight around	.76
7. All in all, boss is good	.69
22. Boss listens to employees	.68
[illegible]. Boss puts on pressure	.67
[illegible] Boss and complaints	.63
9. Boss is nice guy	.63
14. Boss really knows his stuff	.62
15. Boss explains new work	.54
20. Boss on our backs	.52
18. Boss gives good training	.50
26. It's who you know	.42
1. Working conditions are OK	.39
30. Doing well will pay off	.30

Factor II. Work Itself (9.2%)	
10. Getting valuable experience	.73
19. Job dull and boring	.70
5. Can show what I can do	.59
31. Family likes job	.52
30. Doing well will pay off	.43
3. Raw deal on shift work	.37
20. Boss on our backs	.33

Factor III. Co-workers (7.1%)	
6. Cooperation among employees	.79
21. Employees get along well	.75
29. Boss says "do something"	.60
31. Family likes job	.36

Factor IV. Pay (6.5%)	
16. Can get more money elsewhere	.77
13. Pay is OK	.58
3. Raw deal on shift work	.41
20. Boss on our backs	.35
25. Boss puts on pressure	.30

Factor V. Advancement (8.9%)	
12. Company fair in promoting	.73
8. Chance of promotion	.68
26. It's who you know	.57
24. Expect better job here	.52
30. Doing well will pay off	.38
17. Some don't do fair share	.31

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*Since all items were scored so that maximum satisfaction was 5 and maximum dissatisfaction was 1, a positive factor loading indicates a positive relationship between satisfaction on the item and the factor. Thus, those satisfied with one variable loading high on a factor tended to be satisfied with other variables loading on that factor, as there are no negative factor loadings.

**Percentages shown in parentheses are percent of total questionnaire variance accounted for by each factor.

Table 22

Factor Analysis of Satisfaction Items of 182 Black Male Employees

Factor I. Co-workers and relations with boss (9.4%)	
17. Some don't do fair share	.67
29. Boss says "do something"	.66
21. Employees get along well	.59
6. Cooperation among employees	.49
18. Boss gives good training	.45
15. Boss explains new work	.45
22. Boss listens to employees	.43
11. Boss and complaints	.33
1. Working conditions	.31
Factor II. Pay (7.8%)	
13. Pay is OK	.79
16. Can get more money elsewhere	.78
19. Job dull and boring	.47
31. Family likes job	.36
20. Boss on our backs	.36
Factor III. Supervision (15.2%)	
25. Boss puts on pressure	.76
23. Boss throws weight around	.73
7. All in all, boss is good	.67
9. Boss is nice guy	.65
20. Boss on our backs	.62
14. Boss knows his stuff	.47
3. Raw deal on shift work	.47
22. Boss listens to employees	.45
11. Boss and complaints	.44
26. It's who you know	.43
15. Boss explains new work	.42
18. Boss gives good training	.40
6. Cooperation among employees	.32
21. Employees get along well	.31
Factor IV. Future Payoff (10.1%)	
30. Doing well will pay off	.72
31. Family likes job	.64
10. Getting valuable experience	.48
9. Boss is nice guy	.48
1. Working conditions	.42
6. Cooperation among employees	.41
18. Boss gives good training	.38
24. Expect better job here	.37
7. Boss is good	.35
Factor V. Advancement (9.4%)	
8. Chance of promotion	.83
12. Company fair in promoting	.65
5. Can show what I can do	.65
26. It's who you know	.48
10. Getting valuable experience	.37
19. Job dull and boring	.31

(c) There is a sharper differentiation between the boss and co-workers in the definition of Factors I and III in whites than in blacks; in the latter, several of the "supervision" items refer to co-workers, and several of the "co-workers" items refer to the boss. It is as though blacks react more generally and globally to the human climate than do whites.

IV. DISCUSSION AND CONCLUSIONS

The focus of this study was a comparison of job attitudes of white and black male employees in entry-level or near entry-level blue collar jobs. Since the sample of workers from the two ethnic groups were, on the average, approximately similar in socio-economic characteristics, our comparisons are applicable only to blacks who are socio-economically similar to the standard white employees (mostly lower middle-class) who entered such jobs, and cannot necessarily be extrapolated to the "hard-core unemployed" of the black ghettoes. On the other hand, to the extent that is is most often the lower middle-class blacks who are recruited, trained, and retained, our findings may be quite applicable to the usual sample of black employees in such jobs.

Within these limits, our pilot study indicates that the standard questionnaire methodology is equally suitable for the two ethnic groups. Our major substantive conclusions are as follows:

1. The job attitudes of the employees in this sample may be characterized on the whole as being slightly positive or favorable toward their jobs. This is rather typical of most such surveys which have been conducted with white employees (see Blauner, 1963); there is as yet little evidence concerning black-white comparisons. The employees were relatively more satisfied with the nature of the job and with their supervisors, and relatively less satisfied with pay and promotion prospects.

2. On the whole, the black employees were somewhat more satisfied with their jobs than were the white employees. This difference appeared mainly in attitudes toward advancement, co-workers, and job content. However, even where the differences were statistically significant, job attitudes were not markedly correlated with employees' race. Thus, one's race is a factor in one's job satisfaction, but statistically not a particularly potent one. To the extent that it is, black employees are inclined to be slightly more satisfied than whites. Whether this is due to their relative deprivation, to special efforts made to accommodate them, or to some other circumstance, is conjectural.

There are two possible sources of error in the above interpretation, and they work in opposite directions: (1) Lack of sensitivity or reliability of the attitude questionnaire may tend to mask or reduce actual differences between the two groups; thus, the slightly more favorable attitudes shown by the blacks may only represent that part of the iceberg that is above the water, and blacks may in fact have even more favorable job attitudes relative to whites than we have been able to detect. (2) There may be greater pressures felt by blacks than whites to report favorable attitudes (or to play down unfavorable attitudes), such as fear of retribution or not wanting to seem unappreciative for the help that has been given them; to the extent that this is happening, blacks may in fact have less favorable attitudes than we have measured.

We can only adduce indirect evidence bearing on these possibilities. As to the first, there is no doubt that each item is at best a gross and unstable measure. The dimension and total scores, being means of items, are statistically more stable, but are psychometrically less pure and unidimensional, which lowers their reliability. The foregoing, taken in conjunction with the results of the factor analyses, certainly support the possibility that the questionnaire is a blunt instrument that may be blurring larger inter-group differences.

As to the second possibility, the following relevant facts can be noted: (a) the black-white differences in Company A, where identification was requested, were of about the same magnitude as in the remaining companies, suggesting that blacks were not more concerned about possible retribution; (b) the interviewers in the pilot study, where all respondents were identifiable, reported that blacks were at least as ready as whites to "tell it like it is," and in fact the two races obtained about the same average satisfaction scores on the interview. This again allays concern regarding black fear of retribution; (c) there are certain internal evidences of the validity of the questionnaire responses, such as the fact that attitudes toward pay were most favorable in Company A where pay rates were in fact the highest among the companies; that black employees in Company D were less satisfied with pay than white employees (who were in fact higher paid because of much longer tenure), although in several other respects blacks in this company were more satisfied than whites; (d) that blacks in Company B were less satisfied than whites in a number of respects, this being the company that had most recently and least extensively undertaken a program of hiring minority employees.

All told, we are therefore inclined to the conclusion that the true differences in the attitudes of the two ethnic groups in this study are, if anything, even somewhat greater than what we succeeded in detecting.

3. The tendency for black workers to have somewhat more favorable job attitudes than whites, while true on the average, is not uniform among the different companies. It was pronounced in two of the five participating companies (Companies A and D), slight in two others (Companies C and E) and in a fifth (Company B), the black workers tended to have less favorable attitudes.

Since the study was not designed to investigate how company characteristics or practices affect employee attitudes, there are no data which directly explain why these differences among companies exist. However, it is our impression based on discussions with management representatives that Company B, where black workers tended to be less satisfied than whites, was the one which had most recently undertaken a systematic program of minority group employment. One consequence is that the proportion of black employees was lowest in this company and there were few blacks in higher-level or supervisory jobs. This may help explain the relatively pessimistic outlook of black employees on future prospects. Also, there apparently had been relatively little systematic preparation of supervisors in this company regarding any special responsibilities or problems concerning minority workers, which may help explain the relatively low satisfaction expressed toward supervision by these black employees.

Company A, where the job attitudes of blacks tended to be even more favorable than those of whites, had on the contrary been engaged in minority group employment sufficiently long that most of the blacks in this sample had progressed beyond the beginning salary levels. This may possibly account for their comparatively high satisfaction with the company, advancement, job content, and pay level. Length of service also appears to be a factor in job attitudes in Company D, as well; in this company, the average tenure of white males was about twice that of black males, which may explain why the latter are significantly less satisfied with their pay, although more satisfied with a number of other aspects of the job.

In brief, our sketchy information on this point suggests that if one wishes the job attitudes of black employees to be at least as high as that of whites, it is important that sufficient blacks be hired to represent a visible proportion of employees; that a proportional share of the blacks occupy higher-level jobs (especially through promotion); that the systems of seniority and mobility operate so that blacks at each job level do not find themselves to be vastly junior to whites and thus lower in pay and promotional prospects; and that supervisors be trained and otherwise assisted in being competent to avert or to deal with any special problems that may potentially result from the influx of disadvantaged minorities into the work force.

4. In the one company in which supervisory ratings of employee job performance were obtainable, the more satisfied employees tended to receive significantly higher ratings. While the direction of causality is unclear, the finding suggests that either (a) it is desirable for the sake of improving job performance to improve employees' job satisfaction, or (b) for the sake of improving employees' job satisfaction, it is important for their supervisors to think highly of them, which presumably results in more rewards and hence higher satisfaction. Of course, these two processes are not mutually exclusive. Correlation between job satisfaction and performance ratings were generally similar in both ethnic groups, with

two exceptions: black workers who were more satisfied with co-workers tended to receive somewhat higher ratings, but the tendency was the opposite in the case of whites; also, white workers who were more satisfied with pay tended to receive slightly higher ratings, but black workers who were more satisfied with pay tended to receive slightly lower ratings. Since level of satisfaction is typically associated with the degree of importance an employee places on some job feature, this may suggest that supervisors rate more highly black employees who tend to be more interpersonally and less materially oriented, whereas the reverse may be true for whites in this company.

5. The survey also probed various other attitudes, in addition to job satisfaction, which were believed to be relevant to understanding the outlooks of the employees toward life and work. Blacks and whites were notably similar in these respects. They generally rated themselves about equally in various aspects of job performance, in the extent to which they are satisfied with various off-the-job experiences, and in the importance of various life goals. When asked to rate the importance to them of five general job features, they again were in close accord, with good pay and promotions heading the list and relevance to getting another job at the tail. But blacks rated the importance of promotions even higher than did whites. This result takes on even greater significance when combined with the results of another set of questions concerning the expected consequences of doing a good job, which blacks rated as less likely than whites to lead to a promotion or to good relations with their supervisors.

6. The survey focussed especially on attitudes toward supervision, both because of its general importance in the job adjustment of workers

and because of the possibility that supervisors (typically white) might not have developed ways of working effectively with black personnel. This area of the survey turned out to be noteworthy for the absence of overall differences in the satisfactions of blacks and whites, with both groups expressing moderate satisfaction with their supervisors. This finding should allay concerns that it may not be possible to establish good relations between black workers and white supervisors. However, these good relations cannot be taken for granted, for as noted above the blacks in one company had distinctly less favorable attitudes in this area than did the whites.

Examining the comparative and factor-analytic data further for clues that might serve as guides for supervisory behavior, especially toward black employees, the following features appear to be the most salient:

(a) fair treatment, including avoidance of favoritism on such matters as assignment to shift work and promotions;

(b) helping the employee to get ahead, not only by being fair but also by affording good training and explaining new work. It is crucial that the employee have a basis for believing that hard work will lead to approval by his supervisor and to advancement;

(c) being patient and considerate, including listening to problems and complaints and being open to suggestions;

(d) avoiding excessive pressure: for both black and white employees, the type of supervisory behavior which seemed most strongly to produce negative attitudes included putting on too much pressure, throwing his weight around, and being on his subordinates' backs.

7. These latter findings help point up the special salience of advancement and a better future for black employees, a conclusion which gains support from the factor analyses of the job satisfaction items performed separately for black and white subjects. These analyses showed that the structure of job attitudes--the way people organize their subjective reactions to their work--is rather similar in blacks and whites. A notable exception is the appearance only in blacks of a "future payoff" dimension in addition to the one of "advancement" found in both groups; the "future payoff" factor seems less concerned with promotional policies and procedures than with interpersonal considerations in which the supervisor again appears in a key role in facilitating or hindering a better future. Combining the variance explained by these two factors, it can be said that concerns about the future play twice as large a part in determining overall satisfaction scores of blacks as of whites.

The following major questions for future research on this topic are suggested:

1. Since the survey was quite limited in terms of number of companies, geography, and sex, it would be worth determining whether its conclusions would bear up for a more extended sample, and whether they would be modified by different sample parameters such as female employees, white-collar employees, or other regions of the country. (Of interest in this connection is the finding, in a circumstantial sample of female employees in one company, that the blacks were generally less satisfied than the whites, which was the reverse of the male employees.)

2. The black employees included in this sample were not markedly different from whites in terms of available socio-economic characteristics. This suggests that it did not tap a truly "hard core" population of disadvantaged ghetto residents. This is probably because the less fully acculturated "hard core," even when recruited, drop out of employment prior to the time that the typical black employee in this sample was surveyed. There remains the need to understand how these "hard core" dropouts react to their employment opportunities, which may provide important clues to how their employment situations would need to be modified if they are to remain productively employed.

3. The present study indicates significant variations among companies regarding differences between the black and white employees' job satisfaction. However, the number of companies was limited, and the study was not designed to investigate those conditions and practices which might account for such variations. We have speculated above from our limited data what some of these factors might be. Further research would be needed to check on and to extend these inferences. This would entail studying a larger sample of companies not only in terms of the attitudes of their black and white employees, but including also systematic information on policies and practices regarding such matters as personnel selection, training, wages and salary, promotion, and layoffs.

4. The present investigation indicates that in most of the companies there were not marked differences in attitudes of black and white employees toward their supervisors, although this was not true in the case of one company. We have also suggested some of the aspects of supervisory behavior

that may be particularly important in shaping the attitudes of blacks. However, a larger sample of cases is needed in which this problem can be examined in greater depth. The larger sample should permit analysis in the level of the individual work group, and should not only provide more intensive probing of the employees' attitudes toward their supervisors but also comparison of their attitudes with independent measures of the behavior of the supervisors.

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APPENDIX A. INTERVIEW SCHEDULE FOR PILOT STUDY

1. General questions

A. General area where interviewee lives.
B. How interviewee obtained his current job (including any training programs attended).
C. What interviewee actually does on his current job.
D. What interviewee particularly likes and/or dislikes about his job.

2. Lead-in to subsequent questions

If interviewee mentions any of the categories in #3 below during the course of the general questions, interviewer follows up such leads. After such leads are exhausted, or if there are none, the interviewer proceeds to the first category in #3 below and continues until all categories have been covered, justifying the inclusion of said categories (if necessary) on the grounds that others to whom he has talked have mentioned them as important to their work satisfaction.

3. Categories of job satisfaction and attitudes

CATEGORY	QUESTIONS (omitted if not needed, e.g. information is offered before questions are asked)
I. Job Content	1. "Is what you do mostly interesting or boring? Why?" 2. "Are there any changes you would make in the work you have to do if you were given the chance? For example, is there anything you'd like to stop doing, or something you'd like to spend more time on?"
II. Pay	1. "How does your pay compare to what other people make? What other people make more, less, or the same as you?" 2. "Is your pay enough to live on?" 3. "Are you satisfied with the pay? How much should you be making? Do you know anybody who makes that much?"
III. Job Security	1. "Is this a steady job? What are the chances of being laid off? How do you feel about that?
IV. Promotions	1. "What do you think about your future here? How important is it to you to get ahead? Why?" 2. "How do people get ahead where you work?

CATEGORY	QUESTION
V. Supervision	
A. Degree of task orientation vs. employee orientation (Pressure for production)	1. "Tell me about your supervisor. What's he like? Does he pressure you to get the job done? Is he strict about meeting deadlines, and about doing the job well?"
	2. "Does he pay much attention to his employees as people--does he help them out, is he open to suggestions, do the workers feel free to raise problems with him?"
B. Power (focused, in the supervisor, centered in the subordinates, or shared)	3. "How much influence or weight do the employees carry with your supervisor? (a) Does he let them do things pretty much their own way? (b) Does he insist that things be done when and how he wants them? (c) Is there much give-and-take between your supervisor and his employees?"
C. Source of power (legitimacy, expertise, interpersonal relations)	4. "How does your supervisor try to get his employees to do what he thinks should be done? (a) Does he go by the book? (b) Do the men do things his way because they respect his know-how and ability? (c) Do the men do things for him because he is a nice guy and they like him? (d) Does he throw his weight around?"
D. Evaluation	5. "All in all, how well would you say that your supervisor is liked by his employees?"
VI. General	1. "Is there any job you know of that you'd rather have? Why?
	2. "That covers about all that I wanted to ask you. Before we quit, is there anything else you's like to say?"

APPENDIX B. QUESTIONNAIRE USED IN PILOT STUDY

NEW YORK UNIVERSITY

Research Center for Industrial Behavior

INSTRUCTIONS: Below you will find a number of statements about your job.

1. Read each statement.
2. For each statement:

   Mark "Strongly Agree" if you definitely feel the statement is true

   Mark "Strongly Disagree" if you definitely feel the statement is untrue

   Mark "Agree" if you think the statement is more true than untrue

   Mark "Disagree" if you think the statement is more untrue than true

   Mark "Undecided" if you can't make up your mind
3. Do this for all the statements.
4. Please answer every question.
5. There are no "right" or "wrong" answers. Just tell how you feel about each statement.

YOUR ANSWERS ARE SECRET. ONLY RESEARCHERS AT NEW YORK UNIVERSITY WILL SEE THEM.

STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE	
____	____	____	____	____	1. My supervisor is a nice guy.
____	____	____	____	____	2. Compared to other people in this company, I'm not being paid enough.
____	____	____	____	____	3. My supervisor carries weight with his employees.
____	____	____	____	____	4. My supervisor is too easy-going.
____	____	____	____	____	5. My present job suits me better than any other job I know of in the company
____	____	____	____	____	6. The spirit of cooperation among employees in my department is good.
____	____	____	____	____	7. All in all, I would rate my supervisor as good.
____	____	____	____	____	8. I don't have much chance of "getting ahead" or being promoted here.

STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE	
____	____	____	____	____	9. General working conditions in my department--heat, light, space, noise, cleanliness, equipment, etc.--are OK.
____	____	____	____	____	10. I'm getting valuable experience on my present job.
____	____	____	____	____	11. My supervisor doesn't take care of complaints brought to him by his employees.
____	____	____	____	____	12. The company is fair in promoti people.
____	____	____	____	____	13. My pay is OK.
____	____	____	____	____	14. My supervisor really knows his stuff.
____	____	____	____	____	15. My supervisor takes time to explain new work to me.
____	____	____	____	____	16. People doing my kind of work can get more money in other companies.
____	____	____	____	____	17. Some employees in my department are not willing to do their fair share of the work.
____	____	____	____	____	18. My supervisor see that new employees in the department get good training (shown how to do their jobs OK).
____	____	____	____	____	19. My job is dull and boring too much of the time.
____	____	____	____	____	20. My supervisor is always on our backs.
____	____	____	____	____	21. The employees in my department get along well with each other.
____	____	____	____	____	22. My supervisor listens to his employees.
____	____	____	____	____	23. My supervisor likes to "throw his weight around" too much.
____	____	____	____	____	24. I expect to get a better job in this company before too long.
____	____	____	____	____	25. My supervisor puts on too much pressure to get the work done.

APPENDIX C. QUESTIONNAIRE USED AT COMPANIES OTHER THAN COMPANY A

PART I

INSTRUCTIONS: Below you will find a number of statements about your job.

1. Please read each statement
2. For each statement:

   Mark "Strongly Agree" if you definitely feel the statement is true.

   Mark "Strongly Disagree" if you definitely feel the statement is untrue.

   Mark "Agree" if you think the statement is more true than untrue.

   Mark "Disagree" if you think the statement is more untrue than true.

   Mark "Undecided" if you can't make up your mind.
3. Do this for all the statements

		STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
1. General working conditions in my department--heat, light, space, noise, cleanliness, equipment, etc.--are OK.	1.	____	____	____	____	____
2. Compared to other people in this company, I'm not being paid enough.	2.	____	____	____	____	____
3. I get a raw deal too often on things like shift, overtime work, and the work I'm put on.	3.	____	____	____	____	____
4. My boss treats some employees better than they deserve.	4.	____	____	____	____	____
5. My job does not give me a chance to show what I can do.	5.	____	____	____	____	____
6. The spirit of cooperation among employees in my department is good.	6.	____	____	____	____	____
7. All in all, I would rate my boss as good.	7.	____	____	____	____	____

		STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
8. I don't have much chance of "getting ahead" or being promoted here.	8.	_____	_____	_____	_____	_____
9. My boss is a nice guy.	9.	_____	_____	_____	_____	_____
10. I'm getting valuable experience on my present job.	10.	_____	_____	_____	_____	_____
11. My boss doesn't take care of complaints brought to him by his employees.	11.	_____	_____	_____	_____	_____
12. My company is fair in promoting people.	12.	_____	_____	_____	_____	_____
13. My pay is OK.	13.	_____	_____	_____	_____	_____
14. My boss really knows his stuff.	14.	_____	_____	_____	_____	_____
15. My boss takes time to explain new work to me.	15.	_____	_____	_____	_____	_____
16. People doing my kind of work can get more money in other companies.	16.	_____	_____	_____	_____	_____
17. Some employees in my department are not doing their fair share of the work.	17.	_____	_____	_____	_____	_____
18. My boss sees that new employees in the department get good training (shown how to do their jobs OK).	18.	_____	_____	_____	_____	_____
19. My job is dull and boring too much of the time.	19.	_____	_____	_____	_____	_____
20. My boss is always on our backs.	20.	_____	_____	_____	_____	_____
21. The employees in my department get along well with each other.	21.	_____	_____	_____	_____	_____
22. My boss listens to his employees.	22.	_____	_____	_____	_____	_____
23. My boss likes to "throw his weight around" too much.	23.	_____	_____	_____	_____	_____
24. I expect to get a better job in this company before too long.	24.	_____	_____	_____	_____	_____

		STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
25. My boss puts on too much pressure to get the work done.	25.	____	____	____	____	____
26. I'ts not what you know but who you know that counts around here.	26.	____	____	____	____	____
27. Around here, people can't dress and act the way they want to.	27.	____	____	____	____	____
28. Getting promoted depends too much on how long you've worked here.	28.	____	____	____	____	____
29. When my boss says "do something," the men do it.	29.	____	____	____	____	____
30. Doing a good job here will pay off for me.	30.	____	____	____	____	____
31. My family thinks it's good that I have this job.	31.	____	____	____	____	____
32. Some employees "get away with murder" around here.	32.	____	____	____	____	____
33. I expect to be working for this company a year from now.	33.	____	____	____	____	____

PART II

INSTRUCTIONS: Think of the work you are doing now and the other people who are doing it too. Now please answer each of the following questions by checking the one answer that best tells how you feel about each question.

34. How do you stack up against the other employees with regard to how much work you get done? (Check one)

____I'm one of the very best.
____I'm better than average, but not one of the very best.
____I'm about average.
____I'm below average.

35. How do you stack up against the other employees with regard to how good a job you do? (Check one)

____I'm one of the very best.
____I'm better than average, but not one of the very best.
____I'm about average.
____I'm below average.

36. How do you stack up against the other employees with regard to getting to work on time? (Check one)

_____I'm one of the very best.
_____I'm better than average, but not one of the very best.
_____I'm about average.
_____I'm below average.

37. How do you stack up against the other employees with regard to getting to work every day (not taking days off)? (Check one)

_____I'm one of the very best.
_____I'm better than average, but not one of the very best.
_____I'm about average.
_____I'm below average.

38. All in all, how do you stack up against other people doing the same kind of work? (Check one)

_____I'm one of the very best.
_____I'm better than average, but not one of the very best.
_____I'm about average.
_____I'm below average.

39. How easy do you think it would be for you to find a new job in another company if you wanted one? (Check one)

_____Very easy--I would have no trouble at all finding a new job.
_____Fairly easy--I would have a little trouble, but not much.
_____Not too easy--I would have a fair amount of trouble.
_____Hard--I would have a great deal of trouble.

40. In the past, when you have applied for a job, how do you think the people who were doing the hiring felt about you? (Check one)

_____Very good--very glad to get a person like me.
_____Good--happier to get someone like me than they would be to get the average person.
_____Uncertain--they didn't care much one way or the other.
_____Bad--unhappy to get a person like me.
_____I have never applied for a job.

PART III

INSTRUCTIONS: Below are listed a number of things that are important to people. Some things are more important to some people than others; we want to know what is important to you.

41. In the list below, please check the two things that are most important to you (that you care about the most).

Check the two most important:

_____To improve myself.
_____To enjoy my spare time.
_____To have a good job.
_____To have a nice house or apartment.
_____To have a happy family life.
_____To have nice friends.
_____To educate my children.

42. Now, in the list below, please check the two things that are least important to you (that you care about the least).

Check the two least important:

_____To improve myself.
_____To enjoy my spare time.
_____To have a good job.
_____To have a nice house or apartment.
_____To have a happy family life.
_____To have nice friends.
_____To educate my children.

PART IV

INSTRUCTIONS: If you work hard on your job, what chance do you think you have of getting each of the following? (Check either a "Very Good Chance," "Some Chance," or "Little Chance" for each question.)

		VERY GOOD CHANCE	SOME CHANCE	LITTLE CHANCE
43. Getting ahead in this company (being promoted)	43.	____	____	____
44. Getting along well with your boss	44.	____	____	____
45. More pay	45.	____	____	____
46. Getting along well with your co-workers	46.	____	____	____
47. Getting a better job in another company	47.	____	____	____
48. Things you really want out of life	48.	____	____	____

PART V

INSTRUCTIONS: How important are the following things to you in a job? (Answer each question by checking either "Very Important," "Important," or "Not Important."

		VERY IMPORTANT	IMPORTANT	NOT IMPORTANT
49. More pay	49.	_____	_____	_____
50. Getting ahead in this company (being promoted)	50.	_____	_____	_____
51. Getting along well with your co-workers	51.	_____	_____	_____
52. Getting a better job in another company	52.	_____	_____	_____
53. Getting along well with your boss	53.	_____	_____	_____

PART VI

INSTRUCTIONS: Now please tell us about how you feel about some things away from the job. (Answer by checking how much you like each item.)

		LIKE VERY MUCH	LIKE	NEITHER LIKE NOR DON'T LIKE	DON'T LIKE
54. What you do in your spare time	54.	____	____	____	____
55. Your family life	55.	____	____	____	____
56. Friends away from the job	56.	____	____	____	____
57. Taking part in political and community activities	57.	____	____	____	____
58. The education your children are getting	58.	____	____	____	____
59. Your life in general	59.	____	____	____	____

PART VII

INSTRUCTIONS: It will help us in analyzing your answers to know something about your background. Please answer the following questions:

60. What is the highest grade of school you have completed? (Circle the highest grade you have completed.)

Elementary school: 1 2 3 4 5 6 7 8

High school: 9 10 11 12

College: 13 14 15 16

61. What is the highest grade in school your father completed? (Circle the highest grade he completed.)

Elementary school: 1 2 3 4 5 6 7 8

High school: 9 10 11 12

College: 13 14 15 16

Don't know: ______

62. What is the highest grade of school your mother completed? (Circle the highest grade she completed.)

Elementary school: 1 2 3 4 5 6 7 8
High school: 9 10 11 12
College: 13 14 15 16
Don't know: ______

63. When you were growing up, about what was your father's income per week? (Check one)

_____Less than $50 a week
_____$50 - $100 a week
_____More than $100 a week
_____Don't know

64. When you were growing up, what kind of work did your father do mostly? (Please write in the answer below.)

____

____

65. How old are you? __________years

66. How long have you worked for this company? ________years ________months

67. Have you received any special training from a government program to get you ready for your job? (Check one)

_______Yes _______No

If you answered "Yes," did you complete the problem? (Check one)

_______Yes _______No

68. Your sex: (Check one) _______Male _______Female

70. Who did you live with most of the time while you were grown up?

_______Your mother and father
_______Your mother only
_______Your father only
_______Other ________________

71. Where did you live during the time you were growing up?

_______Farm
_______Small town
_______Medium-sized or large city

72. What is your marital status?

_______Single
_______Married
_______Separated
_______Divorced
_______Widowed

73. How many dependent children do you have? __________

74. How many other dependents do you have? __________

APPENDIX D. INSTRUCTIONS FOR ADMINISTRATORS OF QUESTIONNAIRES (OTHER THAN COMPANY A)

1. Before handing out the questionnaires:

   A. Explain the general purpose of the study to the employees. "This study is being conducted by New York University, under the sponsorship of the U.S. Department of Labor, with the cooperation of participating companies. The questions in the booklet are being asked of a large number of employees in companies in the Eastern United States; the goal is to find out what people like and don't like about their jobs so that we can do whatever is possible to make jobs more satisfying and pleasant to work on. No individual will be identified by name (and no names should be put on the questionnaire), and all answers will be combined into a total picture before any results are given out."

   B. Explain how employees were selected to participate. "In order to get a full picture of opinions about the jobs, it is highly desirable to get reactions both from the 'hard-core' who came to the job through special job training programs and from employees who entered through the usual channels. It is impossible, however, to give the questionnaire to everyone in the company. Therefore, a group of employees, some 'hard-core' and some who are not, were selected purely by chance, like picking names out of a hat. There is no difference that we know of between people who are helping out by filling out the questionnaire and those who aren't."

2. Hand out the questionnaires and read the instructions on the first page with the employees.

3. Stress that no one in the company will see the answers. To help reassure the employees about this, have them, when they are finished, place the questionnaires in the stamped, addressed envelopes that are provided and then drop them in a large box that you provide. Do not have the employees take the questionnaires home, as they may neglect to return them. When all envelopes have been collected, drop them in a mailbox.

APPENDIX E. QUESTIONNAIRE USED AT COMPANY A

INSTRUCTIONS: Below you will find a number of statements about your job.

1. Read each statement
2. For each statement:

Mark "I really agree" if you definitely feel the statement is true.

Mark "I really don't agree" if you definitely feel the statement is not true.

Mark "I agree" if you think the statement is more true than untrue.

Mark "I don't agree" if you think the statement is more untrue than true.

Mark "Undecided" if you can't make up your mind.

		I REALLY AGREE	AGREE	UN-DECIDED	I DON'T AGREE	I REALLY DON'T AGREE
1. Most of my supervisors are nice guys.	1.	____	____	____	____	____
2. My friends outside the company make more money than I do.	2.	____	____	____	____	____
3. The employees do what the supervisors want them to do.	3.	____	____	____	____	____
4. Most of my supervisors are too easy-going.	4.	____	____	____	____	____
5. My present job suits me better than any other job I could do in the company.	5.	____	____	____	____	____
6. The cooperation among employees in my work group is good.	6.	____	____	____	____	____
7. All in all, I would say most of my supervisors are good.	7.	____	____	____	____	____
8. I don't have much chance of "getting ahead" or being promoted here.	8.	____	____	____	____	____
9. General working conditions--equipment, heat, light, space, noise, cleanliness, etc.--are okay.	9.	____	____	____	____	____
10. On the whole, my feelings about the company make me want to do a better job.	10.	____	____	____	____	____
11. There is too much pressure on my job.	11.	____	____	____	____	____
12. I look forward to coming to work each day.	12.	____	____	____	____	____

		I REALLY AGREE	I AGREE	UN-DECIDED	I DON'T AGREE	I REALLY DON'T AGREE
13. I am not at all worried about losing my job.	13.	____	____	____	____	____
14. If there is an opening for which I am qualified, I would be fairly considered for that job.	14.	____	____	____	____	____
15. Every day something new and different happens on my job.	15.	____	____	____	____	____
16. Supervisors around here treat you like adult human beings.	16.	____	____	____	____	____
17. I'm getting valuable experience on my present job.	17.	____	____	____	____	____
18. Most of my supervisors don't take care of complaints brought to them by their employees.	18.	____	____	____	____	____
19. The company is fair in promoting people.	19.	____	____	____	____	____
20. My pay is okay.	20.	____	____	____	____	____
21. Most of my supervisors really don't know their job.	21.	____	____	____	____	____
22. Most of my supervisors take time to explain new work to me.	22.	____	____	____	____	____
23. People doing my kind of work can get more money in other companies.	23.	____	____	____	____	____
24. Some employees in my work group don't do their fair share of work.	24.	____	____	____	____	____
25. New employees get good training in this company.	25.	____	____	____	____	____
26. My job is dull and boring too much of the time.	26.	____	____	____	____	____
27. Most of my supervisors are always on my back.	27.	____	____	____	____	____
28. The employees in my work group get along well with each other.	28.	____	____	____	____	____
29. Most of my supervisors listen to their employees.	29.	____	____	____	____	____
30. Most of my supervisors like to "throw their weight around" too much.	30.	____	____	____	____	____
31. I expect to get a better job in this company before too long.	31.	____	____	____	____	____
32. Most of my supervisors put on too much pressure to get the work done.	32.	____	____	____	____	____

		I REALLY AGREE	I AGREE	UN-DECIDED	I DON'T AGREE	I REALLY DON'T AGREE
33. It's "who you know" and not "what you know" that counts around here for getting promoted.	33.	____	____	____	____	____
34. I get a raw deal too often around here on things like overtime, the job I'm put on, and shift work.	34.	____	____	____	____	____
35. Doing a good job here will pay off for me.	35.	____	____	____	____	____
36. I could have done just as well at work without the training the company gave me.	36.	____	____	____	____	____
37. I would rather be doing this same job for another company.	37.	____	____	____	____	____
38. This is a good company to work for.	38.	____	____	____	____	____
39. Most of my supervisors treat me with respect.	39.	____	____	____	____	____
40. I enjoy working outside.	40.	____	____	____	____	____
41. I have a chance to use my own special abilities in my work.	41.	____	____	____	____	____
42. Top management doesn't care about happens to people like me.	42.	____	____	____	____	____
43. When I was hired, I was told what the job would be like.	43.	____	____	____	____	____
44. My friends outside the company think I have a good job.	44.	____	____	____	____	____
45. My job is important to the company.	45.	____	____	____	____	____
46. The company makes sure we have good equipment to work with.	46.	____	____	____	____	____
47. The company keeps me informed about openings which I might be eligible for.	47.	____	____	____	____	____
48. There are plenty of opportunities around here for more training if you want it.	48.	____	____	____	____	____
49. There is too much "favoritism" played around here.	49.	____	____	____	____	____
50. There isn't enough attention paid to safety on my job.	50.	____	____	____	____	____
51. This airline shows a lot of personal interest in its employees.	51.	____	____	____	____	____
52. Just working for an airline makes me happy.	52.	____	____	____	____	____
53. Top management does only what it has to for the employees.	53.	____	____	____	____	____

INSTRUCTIONS: For these questions place a check next to the answer which most closely expresses your feelings about each item.

54. Taking all things into consideration, I am...

_____1. Very satisfied with my job.
_____2. Satisfied with my job.
_____3. Dissatisfied with my job.
_____4. Very dissatisfied with my job.

55. On the whole, I would rate my performance on the job as...

_____1. Much better than average.
_____2. About average.
_____3. A little below average.
_____4. Far below average.

INSTRUCTIONS: How important are the following things to you in a job? (Answer each question by checking how important you think each item is.)

		VERY IMPORTANT	NOT TOO IMPORTANT	NOT IMPORTANT AT ALL
56. Getting more pay	56.	_____	_____	_____
57. How much say you have about how you do your job.	57.	_____	_____	_____
58. Chance to use your own special skills.	58.	_____	_____	_____
59. The feeling that your job is important to the company.	59.	_____	_____	_____
60. Respect from friends outside the company.	60.	_____	_____	_____
61. Friendship at work.	61.	_____	_____	_____
62. Good supervision.	62.	_____	_____	_____
63. Better company benefits.	63.	_____	_____	_____
64. A work place where everyone is treated fairly.	64.	_____	_____	_____
65. The kind of work you do.	65.	_____	_____	_____
66. The opportunity for more training.	66.	_____	_____	_____
67. Respect from supervisors.	67.	_____	_____	_____
68. Respect from co-workers.	68.	_____	_____	_____
69. A promotion.	69.	_____	_____	_____

If you do your best on the job, what chance do you think you have of getting each of the following: (Check either a "Good Chance," "Some Chance," or "No Chance.")

		GOOD CHANCE	SOME CHANCE	NO CHANCE
70. Getting more pay.	70.	____	____	____
71. Chances of getting ahead.	71.	____	____	____
72. More say about how you do your job.	72.	____	____	____
73. The chance to use your own special skills.	73.	____	____	____
74. Respect from friends outside the company.	74.	____	____	____
75. Friendship at work.	75.	____	____	____
76. Better supervision.	76.	____	____	____
77. Better company benefits.	77.	____	____	____
78. A work place where everyone is treated fairly.	78.	____	____	____
79. The opportunity for more training.	79.	____	____	____
80. Respect from your co-workers.	80.	____	____	____
81. Respect from supervisors.	81.	____	____	____

APPENDIX F. RATER FORM USED AT COMPANY A

FLEET SERVICE CLERK EVALUATION FORM

Selection Division

Personnel Services

1969

NYC/REA

Rater ______________________ Title ______________

Name of Employee to be Rated ______________________________

Date ____________________ Employee Number ☐☐☐☐☐

How long have you known the employee named above? ☐☐ Months ☐☐ Years

Please read the following instructions carefully before completing this evaluation:

Instructions

1. For each rating characteristic listed, decide how the employee compares with other employees who are doing the same job.

2. Then, blacken out only one of the nine circles to show where the employee stands on each characteristic. In the example below, circle number 5 is blackened. Such a rating would indicate that an employee has "average learning ability."

3. Since your ratings will influence the types of tests used for selecting Fleet Service Clerks in the future, please rate each employee accurately.

Example

ABILITY TO LEARN NEW WORK

1	2	3	4	5	6	7	8	9
○	○	○	○	●	○	○	○	○
Has much difficulty in learning new work				Average learning ability				Quickly learns how to do new work

PLEASE TURN THE PAGE OVER AND BEGIN

QUALITY OF WORK

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Frequent mistakes; careless				Work usually ok; mistakes seldom made			Rarely makes a mistake; very careful	

QUANTITY OF WORK

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Just does not produce				Puts in a "good day's work"			Usually out-produces everyone	

ATTENDANCE

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Absent too often				Occassionally misses a day			Never misses a day's work	

COOPERATION WITH CO-WORKERS

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Very difficult to get along with				Gets along ok with everyone			Works well with everyone	

WILLINGNESS TO WORK

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Hates to work; actively avoids work				Usually likes to work			Likes to work; volunteers for work	

ATTITUDE TOWARD COMPANY

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Constantly critical of company				Seldom criticizes company			Proud to be working for company	

PUNCTUALITY

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Is late far too often; unreliable				Usually arives on time			Arrives early for work; very reliable	

OVERALL JOB PERFORMANCE

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Unsatisfactory				Average				Excellent

COMMON SENSE

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Makes very poor judgments on the job			Occasionally makes very poor judgments				Makes very good judgments on the job	

ABILITY TO FOLLOW INSTRUCTIONS

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
Has much difficulty in following instructions				Average		Has almost no difficulty in following instructions		